

# BUSIT 103- SQL Fundamentals Spring 2017 Syllabus

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Office Hours: Tuesday, 3pm-5pm

Wednesday, 8:30am-11:30am

or by appointment

#### **Course Information**

#### **Course Outcomes**

After completing this class, students should be able to:

- Explain the structure of tables and the function of keys in a relational database.
- Use diagrams to show how tables in a relational database relate to one another.
- Interpret business information requests to produce accurate SQL statements.
- Construct SQL gueries to retrieve data from one or more tables in a database.
- Produce SQL queries using logical operators, complex expressions, filters.
- Develop subqueries to extend functionality to SQL statements.
- Prepare and export data from a database into a spreadsheet application.

#### **How Outcomes Will be Met**

Course outcomes will be met through:

- Online lectures (recorded)
- Online demonstrations (recorded)
- Hands-on homework assignments
- Online discussions
- Terminology reviews

There is no classroom requirement for this course. However, in-person office hours and help sessions will be offered.



## **Grading**

Your course grade will be calculated as follows:

| Percentage | Letter Grade |
|------------|--------------|
| 96 – 100   | А            |
| 92 – 95.9  | A-           |
| 88 – 91.9  | B+           |
| 84 – 87.9  | В            |
| 80 – 83.9  | B-           |
| 76 – 79.9  | C+           |
| 72 – 75.9  | С            |
| 70 – 71.9  | C-           |
| 66 – 69.9  | D+           |
| 60 – 65.9  | D            |
| below 60   | F            |

#### Homework Activities

Most of your grade will come from the homework assignments. Becoming proficient in SQL is achieved by using the software for many hours. Homework gives you the opportunity to immerse yourself in the software and perform the mental exercise necessary to understand SQL queries. The weight of each homework assignment can vary with the number and complexity of the tasks required. Consult the appropriate Homework Assignment sheet for additional instructions. These sheets are attached to each Assignment.

There is a significant amount of homework in this class. You should check into the class at least every other day and can expect to spend at least 12 hours per week to complete the assigned work. Be sure that you can spend the time this quarter. If you are overloaded, this may not be the quarter for you to take SQL Fundamentals. Modules 8 and 9 are considered particularly intensive by students; plan extra time during these two weeks.

Start the module as soon as it is posted. Read the chapters, view the lectures and demos, and read the homework questions. Let the materials digest and then begin the homework. Studies in learning show that the brain will work on the problems in your subconscious after you have read them. When you wait until the last minute to do the activities in this class, you do not allow your brain time to process the materials and learning is actually more difficult.

You are expected to read the text, consult the lectures and instructional animations, use Help in the application, consult Books Online or Books 24x7, post questions to the appropriate Discussion board, and locate Web resources when you encounter problems when working on the homework. Tutors in the BTS open classroom and lab assistants in the N250 lab will not help you with your homework.

Terminology Reviews are graded as completed. I review all incorrect answers and update the final score as described on the Module 01 Terminology Review. The grades for the SQL homework are released soon after all the homework has been submitted or the deadline has past, whichever comes first.



#### Late Work

**No late work is accepted.** If the due date has arrived, but you are not yet finished with the assignment, turn it what you have completed.

If, due to extreme or unusual circumstances, you find you are unable to turn in an assignment on time, please contact me as soon as possible – please know that I am reasonable.



#### **Discussions**

Discussions are an integral part of this course. Some are graded; most are not. I use discussions to relay information to you about the topics we are studying. I will post clarification about homework questions, corrections in the case of typos or other issues in demos and homework, information about the data and the databases, helpful hints, resources, and more. You are expected to consult the appropriate discussion board before posting or emailing your question, and you will be held responsible for materials posted by the instructor to the discussion boards.

## **Books and Materials Required**

The course requires the textbook SQL Queries for Mere Mortals 3rd Ed: A Hands-on Guide to Data Manipulation in SQL by John L. Viescas and Michael J. Hernandez ISBN: 978-0321992475.

You will also need a method of storing your files; for example, a USB (flash or thumb) drive or cloud storage.

The data for the course should be downloaded from the course site. It is stored with the Getting Started materials.

You will need access to Microsoft SQL Server 2016 Express or SQL Server 2016. The full SQL Server version is not provided to you but it is available for you to use in various locations on campus. You may download the SQL Server 2016 Express free version from Microsoft. See the information in the document Installing SQL Server 2016 Express located in the Getting Started module for links and instructions for installing. SQL Server runs only on the Windows operating system. Find more information at: <a href="Hardware and Software Requirements for Installing SQL Server 2016">Hardware and Software Requirements for Installing SQL Server 2016</a>.

You will also need a word processing application and Excel 2010 or higher. Microsoft Word is recommended for word processing but not required. These applications are not provided free of charge but are installed on most BC computer systems. If you are new to BC's online system, visit the <u>elearning site</u> for information, tutorials, and campus workshops.

#### **Course Resources and Policies**

Many of the course materials are located on the course site in Canvas. You are required to use Microsoft SQL Server 2016; however, you do not need to purchase it. See the document titled Installing SQL Server 2016 Express on the Getting Started page. If you are using your own PC or MAC, you are responsible for obtaining and installing the software and databases. Your instructor is prohibited from installing or configuring personal computers. SQL Server does not run on the native MAC OS. If you are not able to get the software installed and operational by the end of the first week of the class, you should consider other options: using college equipment, consulting outside technical experts, or dropping the course. If you are using a PC that is checked out from the BC Media Center or rented from the BC Bookstore, verify that you can install software. Usually PCs from the LMC cannot be altered, and PCs rented from the Bookstore allow installations and changes to the configurations.

All students registered for classes at Bellevue College are entitled to a network and e-mail account. Student network accounts can be used to access student e-mail, log in to computers in labs and classrooms, connect to the BC wireless network and to log in to MyBC. To create your account, go to: NetID Management.



The software necessary to complete this class is installed on PCs in A134 and N252. Talk with one of the attendants at the main desk in N250 for information on accessing these rooms when they are not in use for classes. There may also be access to SQL Server 2016 in N250. Again, speak with the attendants at the desk for more information on using these installations.

Student technical support is available at <u>BC Helpdesk</u>. See the Announcements for more information. Often additional support is available during the first one or two weeks of each quarter.

## **Tips for Success**

- 1. Read the syllabus.
- 2. Print a copy of the course syllabus and the calendar in a format that works for you; refer to it often.
- 3. Read the all the materials in the modules.
- 4. Check into the course at least every other day; read the Announcements and the Discussions.
- 5. Post questions when you have them.
- 6. Don't wait until the last minute to submit homework or tests.
- 7. Form study groups on campus or online.
- 8. Understand the time commitments necessary for success in this class.
- 9. Know the late work policy.
- 10. Don't fall behind.
- 11. Don't race ahead. Follow the pace of the course.



# **BUSIT 103 Course Calendar/Schedule (Tentative)**

| Week# | Week Starting Monday | Assignment Description                       | Textbook Chapters  |
|-------|----------------------|--|--------------------|
| 1     | April 3              | Read Materials in Getting Started Module     | Introduction       |
|       |                      | Install SQL Server 2016 Express              |                    |
|       |                      | Read chapters 1-3 in textbook                |                    |
| 2     | April 10             | Module 1 Intro to Databases                  | 1,2,3              |
| 3     | April 17             | Module 2 Creating a Simple Query             | 4                  |
| 4     | April 24             | Module 3 Expressions                         | 5                  |
| 5     | May 1                | Module 4 Filtering Data                      | 6                  |
|       |                      | Module 5 Importing/Exporting Data            |                    |
| 6     | May 8                | Module 6 Joining Tables-Inner Joins          | 7,8                |
| 7     | May 15               | Module 7 Querying Data from a Data           | None               |
|       |                      | Warehouse                                    |                    |
| 8     | May 22               | Module 8 Module 8 Joining Tables-Outer       | 9                  |
|       | ,                    | Joins  |                    |
| 9     | May 29               | Module 9 Subqueries                          | 10, 11             |
| 10    | June 5               | Module 10 Aggregating Data                   | 12                 |
| 11    | June 12              | Module 11 Grouping and Summarizing Data      | 13,14              |
|       |                      | Conclusion                                   |                    |
|       |                      | Conclusion                                   |                    |
| 12    | June 16              | Online class complete. All work submitted by | Recommend reading  |
|       |                      | June 16 at 11:59 pm                          | Chapters 18 and 19 |
|       |                      | •  | •                  |

# **Final Exam Schedule**

This online-only class will not have a final exam.



# **Classroom Learning Atmosphere**

## **Instructor's Expectation**

#### **Discussion Board Conduct**

- 1. Watch Your Language: Please don't use racist, obscene, lewd, violent, vulgar, or sexually-oriented language. Refrain from using any terms or words or making comments that are deemed derogatory to anyone or any group.
- 2. Be Nice: Constructive, thoughtful, helpful criticism is encouraged. Mean, demeaning comments or put-downs regarding the questions or ideas of others aren't helpful to anyone. Threats, bullying, and downright abuse language will get you reported and could result in additional action by the college.
- 3. Grammar Counts: Please be mindful of the way you do (or do not) use punctuation correctly. Make your language as clear, objective and understandable as possible to this global community. And PLEASE DON'T YELL--turn off the caps lock.
- 4. Don't Be Shy To Share: If you have a question, get it out there. How can we help you if we don't know your questions? Try to work through the problem as much as possible before posting your question. Let us know what you think and what you have tried. If you can answer another student's question, do so. The instructor may not answer a question if another student has already answered it satisfactorily.
- 5. Don't Post Code: In this class we are expected to write our own SELECT statements. Don't post your full statement on the discussion board. You can post a small portion of the code and fill in the rest with language. For example, I could write "In my SELECT clause I am trying to convert the order date to MM/DD/YYYY. When I write CONVERT(date, O.OrderDate, 101) AS DateOfOrder, I am getting YYYY-MM-DD. What am I missing?" How would one answer this question? "There is a mismatch between the datatype and the style. That style doesn't work with the Date datatype." The question has been answered but the person was not simply handed the answer.
- 6. Just Try: We have learners from all over the world and we recognize that English is a complex language. I simply ask that you engage in the discussions using grammar and language to the best of your ability.

#### **Affirmation of Inclusion**

Bellevue College is committed to maintaining an environment in which every member of the campus community feels welcome to participate in the life of the college, free from harassment and discrimination.

We value our different backgrounds at Bellevue College, and students, faculty, staff members, and administrators are to treat one another with dignity and respect. http://www.bellevuecollege.edu/inclusion/.

Learn more about the Office of Equity and Pluralism and other organizations on campus that promote inclusion. To learn more, follow this link: <a href="http://www.bellevuecollege.edu/pluralism/">http://www.bellevuecollege.edu/pluralism/</a></a>

The instructor cares about social justice. Current events may be acknowledged and discussed in class.



## **Religious Holidays**

Students who expect to miss classes, examinations, or any other assignments as a consequence of their religious observance should be provided with a reasonable alternative opportunity to complete such academic responsibilities. It is the obligation of students to provide faculty with reasonable notice of the dates of religious holidays on which they will be absent, preferably at the beginning of the term. Students who are absent on days of examinations or class assignments should be offered an opportunity to make up the work without penalty (if they have previously arranged to be absent), unless it can be demonstrated that a makeup opportunity would constitute an unreasonable burden on a member of the faculty. Should disagreement arise over what constitutes an unreasonable burden or any element of this policy, parties involved should consult the department chair, or Dean.

## **College Anti-Discrimination Statement**

Bellevue College does not discriminate on the basis of race or ethnicity; color; creed; national origin; sex; marital status; sexual orientation; age; religion; genetic information; the presence of any sensory, mental, or physical disability; gender identity or veteran status in educational programs and activities which it operates.

## **Confidentiality and Mandatory Reporting**

As an instructor, one of my responsibilities is to help create a safe learning environment on our campus. It is my goal that you feel able to share information related to your life experiences in classroom discussions, in your written work, and in our one-on-one meetings. I will seek to keep information you share private to the greatest extent possible. However, I am required to share with the Title IX Coordinator any and all information regarding sexual assault and other forms of sexual misconduct (e.g. dating violence, domestic violence, stalking) that may have occurred on campus or that impacts someone on campus. Students may speak to someone confidentially by contacting the BC Counseling Center at (425) 564-2212. The Title IX Office can be contacted at 425-564-2441 and more information can be found at <a href="https://www.bellevuecollege.edu/titleix/">www.bellevuecollege.edu/titleix/</a>.

For further information and contacts, please consult College Anti-Discrimination Statements.

# **Student Code of Conduct and Academic Integrity**

Any act of academic dishonesty, including cheating, plagiarism (using the ideas or words of another as one's own without crediting the source), and fabrication and inappropriate/disruptive classroom behavior are violations of the Student Code of Conduct at Bellevue College. Examples of unacceptable behavior include, but are not limited to, talking out of turn, arriving late or leaving early without a valid reason, allowing cell phones/pagers to ring, and inappropriate behavior toward the instructor or classmates. The instructor can refer any violation of the Student Code of Conduct to the Dean of Student Success for investigation. Specific student rights, responsibilities, and appeal procedures are listed in the Student Code of Conduct at: Student Code.



#### **Special Needs or Unusual Circumstances**

If a situation occurs during the quarter that affects a student's ability to complete the work, the student must contact the instructor immediately. Any student who finds that he or she cannot manage the workload is encouraged to withdraw.

The Disability Resource Center serves students with a wide array of learning challenges and disabilities. If you are a student who has a disability or learning challenge for which you have documentation or have seen someone for treatment and if you feel you may need accommodations in order to be successful in college, please contact us as soon as possible.

If you are a person who requires assistance in case of an emergency situation, such as a fire, earthquake, etc., please meet with your individual instructors to develop a safety plan within the first week of the quarter.

If you are a student with a documented autism spectrum disorder, there is a program of support available to you. Contact <a href="mailto:asn@bellevuecollege.edu">asn@bellevuecollege.edu</a> or 425.564.2764. ASN is located in the Library Media Center in D125. <a href="https://www.bellevuecollege.edu/autismspectrumnavigators/">www.bellevuecollege.edu/autismspectrumnavigators/</a>

The DRC office is located in B 132 or you can call our reception desk at 425.564.2498. Deaf students can reach us by video phone at 425-440-2025 or by TTY at 425-564-4110. Please visit our website for application information into our program and other helpful links at <a href="https://www.bellevuecollege.edu/drc">www.bellevuecollege.edu/drc</a>.

#### **Dispute Resolution**

Should you have concerns about any aspect of this class, I invite you to bring them to me. In any of your classes, if for any reason you don't feel comfortable speaking with your instructor, the usual next step would be to talk with the program chair. The program chair for IT is Sylvia Unwin (sylvia.unwin@bellevuecollege.edu) 425-564-2833 (A254). If for any reason you don't feel comfortable raising your concerns with the program chair, you can bring concerns about the class to the iBIT Dean, Jody Laflen (jody.laflen@bellevuecollege.edu) in the iBIT office (A254). An additional resource for concerns you find aren't being addressed by faculty or administration is the Ombuds Office.

Below is also the link to the student academic dispute resolution procedure here at Bellevue College. Please make sure you are acquainted with your rights before issues arise: <u>Student Academic Dispute Resolution Procedure</u>.



## **Important Links**

#### Bellevue College E-mail and access to MyBC

All students registered for classes at Bellevue College are entitled to a network and e-mail account. Your student network account can be used to access your student e-mail, log in to computers in labs and classrooms, connect to the BC wireless network and log in to *My*BC. To create your account, go to: <u>Create Email</u>

BC offers a wide variety of computer and learning labs to enhance learning and student success. Find current campus locations for all student labs by visiting the Technology Help Desk

## **Disability Resource Center (DRC)**

The Disability Resource Center serves students with disabilities. A disability includes any physical or mental impairment that substantially limits one or more major life activities. Common disabilities include physical, neurological (e.g. Autism, ADD), and mental health (e.g. depression, anxiety). If you are a student who has a disability or if you think you may need accommodations in order to have equal access to programs, activities, and services, please contact the DRC.

If you require assistance in an emergency, please meet with your individual instructors to develop a safety plan for while in class and contact the DRC to develop a safety plan for while you are elsewhere on campus.

If you are a student with a documented autism spectrum disorder, there is an additional access program available to you. <u>Contact Autism Spectrum Navigators</u> (ASN). Email and phone number is on the web page. ASN is located in the Library Media Center in D125.

The DRC office is located in building B Room 132. You can contact the DRC by stopping by B132, calling our desk at 425-564-2498, emailing <a href="mailto:drc@bellevuecollege.edu">drc@bellevuecollege.edu</a>, and Deaf students can reach us by Skype (account name **DRCatBC**). For more information about the services we offer, including our Initial Access Application, visit our website at <a href="mailto:www.bellevuecollege.edu/drc">www.bellevuecollege.edu/drc</a>.

#### Accessibility

The online elements of this course are designed to be welcoming to, accessible to, and usable by everyone, including students who are English-language learners, have a variety of learning styles, have disabilities, or are new to online learning. Be sure to let me know immediately if you encounter a required element or resource in the course that is not accessible to you. Also, let me know of changes I can make to the course so that it is more welcoming to, accessible to, or usable by students who take this course in the future.



## **Public Safety and Emergencies**

Public Safety is located in the D building (D171) and can be reached at **425-564-2400** (easy to remember because it's the only office on campus open 24 hours a day—2400). Among other things, Public Safety serves as our Parking Permits, Lost and Found, and Emergency Notification center. Please ensure you are signed up to receive alerts through our campus alerting system by registering at RAVE Alert Registration

If you work late and are uneasy about going to your car, Public Safety will escort you to your vehicle. To coordinate this, please phone ahead and let Public Safety know when and where you will need an escort.

Please familiarize yourself with the emergency postings by the door of every classroom and know where to go in the event of an evacuation. Your instructor will be asked if anyone might still be in the building, so check in before you do anything else. Emergency responders will search for anyone unaccounted for.

#### If a major emergency occurs, please follow these three rules:

- 1) Take directions from those in charge of the response -We all need to be working together.
- **2) Do not get in your car and leave campus (unless directed to)** Doing so will clog streets and prevent emergency vehicles from entering the scene. Instead, follow directions from those in charge.
- 3) In an emergency, call 911 first, then Public Safety.

Please do not hesitate to call Public Safety if you have safety questions or concerns at any time. You may also visit the <u>Public Safety</u> web page for answers to your questions.

#### **Academic Calendar**

The Bellevue College Academic Calendar is separated into two calendars. They provide information about holidays, closures and important enrollment dates such as the finals schedule.

- The <u>Enrollment Calendar</u> provides admissions and registration dates and important dates for withdrawing and receiving tuition refunds.
- The <u>College Calendar</u> gives you the year at a glance and includes college holidays, scheduled closures, quarter end and start dates, and final exam dates.

#### **Additional Information**

All students should be aware of the many tutorial services provided by the <u>Academic Success Center</u>. If you need free tutorial help, please visit them in D204.

A more comprehensive list of available resources is available at Bellevue College Resources.

If you feel threatened or see something that may indicate trouble, please report it right away at <u>Report Concerns</u>. We all need to help keep our campus safe for everyone.

## Thanks to Debi Griggs, Professor (Emeritus)

Much of this course material was created by Debi Griggs, Professor (Emeritus).