



COURSE INFORMATION

Course title: Data Management for Business Analytics

Course code: BAIT 507 Credits: 1.5 Session, term, period: Fall 2022, Period 2 Class location: HA 254

Section(s): BA1, BA2 Class times: BA1: Mon/Wed 2pm-4pm

BA2: Mon/Wed 4pm-6pm

Course duration: Oct 31 – Dec 2, 2022 Pre-requisites: N/A
Division: MBAN Co-requisites: N/A

Program: MBAN

INSTRUCTOR INFORMATION

Instructor: Zeliha Ural Merpez

Phone: N/A Office location: HA 349 & 351

Email: zeliha.merpez@sauder.ubc.ca Office hours: Tue/Thu 11am-11:50pm

Teaching assistant: Usama Jillani

Office hours: TBD Email: N/A

COURSE DESCRIPTION

This course introduces theory and technology of database management for business analytics. It covers the fundamentals of databases, data designs for business analytics, data access using structured query language (SQL), and design interfaces facilitating user-centric access and queries. In addition to covering these fundamentals about data management, this course also aims to prepare students for relevant job interview questions.

COURSE FORMAT

Classes consist of two in-person sessions per week of two hour each. Classes will require attendance inperson. Instructor will use the classroom lectures and software walkthroughs to build an understanding of key concepts. Please bring your laptops to class as we will be using software to write and test SQL queries and using other database technologies in-class together as exercises and practice, as well as small group-work.

LEARNING OBJECTIVES

By the end of this course, students will be able to:

- 1. Create and manipulate a database using SQL.
- 2. Develop conceptual data models using entity-relationship diagrams.
- 3. Develop relational schemas from entity-relationship diagrams.
- 4. Learn about alternative data technologies like NoSQL, graphs, etc.
- 5. Effectively prepare for SQL questions in real-world job interviews.

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ASSESSMENTS

Summary

Component	<u>Weight</u>
Assignments	40%
Final exam	50%
Class participation	10%
Total	<u>100</u> %

Details of Assessments

[Explanation of each category in the Summary of Assessments above]

There will be about one assignment that will be individually assessed and done per week. Participation will be taken through class attendance and questions/interaction with other students. Finally, the final exam will take up the remaining 50% of your final grade and will be conducted in-person at the end of the term.

LEARNING MATERIALS

Textbook: There is no required textbook for this course.

Canvas: Access to all course resources (slides, discussion forum, assignments, and etc.) will be through http://canvas.ubc.ca You need a Campus Wide Login (CWL) account to access the course web site. If you don't have a CWL account, please register at: http://cwl.ubc.ca.

Computers: You need a reasonably fast Windows, Mac, or Linux computer manufactured within 5 years for learning activities in this course. The computer should have both webcam and microphone. Recommended: dual-core processor and 4GB of memory minimum.

Web Browser: You need to install either Google Chrome or Mozilla Firefox web browser for learning activities in this course. Other web browsers may not be compatible with some web-based services used in this course

COURSE-SPECIFIC POLICIES AND RESOURCES

Missed or late assignments, and regrading of assessments

Late submissions will not be accepted and will receive a grade of zero.

Academic Concessions

If extenuating circumstances arise, please contact the RHL Graduate School program office as early as reasonably possible, and submit an <u>Academic Concession Request & Declaration Form</u>. If an academic concession is granted during the course, the student will be provided options by RHL, or by the instructor in consultation with RHL, per <u>UBC's policy on Academic Concession</u>.

Code Plagiarism

Code plagiarism falls under the UBC policy for <u>Academic Misconduct</u>. Students must correctly cite any code that has been authored by someone else or by the student themselves for other assignments. Cases of "reuse" may include, but are not limited to:

- the reproduction (copying and pasting) of code with none or minimal reformatting (e.g., changing the name of the variables)
- the translation of an algorithm or a script from a language to another

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• the generation of code by automatic code-generations software

An "adequate acknowledgement" requires a detailed identification of the (parts of the) code reused and a full citation of the original source code that has been reused.

Students are responsible for ensuring that any work submitted does not constitute plagiarism. Students who are in any doubt as to what constitutes plagiarism should consult their instructor before handing in any assignments.

POLICIES APPLICABLE TO COURSES IN THE ROBERT H. LEE GRADUATE SCHOOL

Attendance

Excepting extenuating circumstances, students are expected to attend 100% of their scheduled class hours. Absent students limit their own academic potential, and that of their classmates, and cause unnecessary disruption to the learning environment. Students missing more than 20% of the total scheduled class hours for a course (including classes held during the add/drop period) without having received an academic concession will be withdrawn from that course. Withdrawals, depending on timing, could result in a "W" or an "F" standing on the transcript.

COVID-19 Policies for Attendance & Academic Concessions:

If a student feels unwell, they should stay home and send a courtesy email to each impacted instructor and cc their program manager. The student should also submit an <u>Academic Concession Request & Declaration Form.</u>

If a student suspects possible COVID-19 infection, they should use the BC Ministry of Health's <u>self-assessment tool</u>, to help determine whether further assessment or testing for COVID-19 is recommended.

Punctuality

Students are expected to arrive for classes and activities on time and fully prepared to engage. Late arrivals may be refused entry at the discretion of the instructor or activity lead. Students arriving later than halfway through a scheduled class will be treated as absent for that class.

Electronic Devices

Devices such as laptops, tablets, and cell phones are not permitted to be used in class unless directed by the instructor for in-class activities. Students who do not follow the School's policy in this regard may be required to leave the room for the remainder of the class, so that they do not distract others. Research shows that students' use of laptops in class has negative implications for the learning environment, including reducing their own grades and the grades of those sitting around them.

Citation Style

Please use the American Psychological Association (APA) reference style to cite your sources.

Details of the above policies and other RHL Policies are available at: http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,199,506,1625

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UNIVERSITY POLICIES AND RESOURCES

UBC provides resources to support student learning and to maintain healthy lifestyles but recognizes that sometimes crises arise and so there are additional resources to access including those for survivors of sexual violence. UBC values respect for the person and ideas of all members of the academic community. Harassment and discrimination are not tolerated nor is suppression of academic freedom. UBC provides appropriate accommodation for students with disabilities and for religious observances. UBC values academic honesty and students are expected to acknowledge the ideas generated by others and to uphold the highest academic standards in all of their actions. Details of the policies and how to access support are available on the UBC Senate website at https://senate.ubc.ca/policies-resources-support-student-success.

Respect for Equity, Diversity, and Inclusion

The UBC Sauder School of Business strives to promote an intellectual community that is enhanced by diversity along various dimensions including status as a First Nation, Metis, Inuit, or Indigenous person, race, ethnicity, gender identity, sexual orientation, religion, political beliefs, social class, and/or disability. It is critical that students from diverse backgrounds and perspectives be valued in and well-served by their courses. Furthermore, the diversity that students bring to the classroom should be viewed as a resource, benefit, and source of strength for your learning experience. It is expected that all students and members of our community conduct themselves with empathy and respect for others.

Academic Integrity

The academic enterprise is founded on honesty, civility, and integrity. As members of this enterprise, all students are expected to know, understand, and follow the codes of conduct regarding academic integrity. At the most basic level, this means submitting only original work done by you and acknowledging all sources of information or ideas and attributing them to others as required. This also means you should not cheat, copy, or mislead others about what is your work. Violations of academic integrity (i.e., misconduct) lead to the breakdown of the academic enterprise, and therefore serious consequences arise and harsh sanctions are imposed. For example, incidences of plagiarism or cheating may result in a mark of zero on the assignment or exam and more serious consequences may apply if the matter is referred to the President's Advisory Committee on Student Discipline. Careful records are kept in order to monitor and prevent recurrences.

COPYRIGHT

All materials of this course (course handouts, lecture slides, assessments, course readings, etc.) are the intellectual property of the instructor or licensed to be used in this course by the copyright owner. Redistribution of these materials by any means without permission of the copyright holder(s) constitutes a breach of copyright and may lead to academic discipline and could be subject to legal action. Any lecture recordings are for the sole use of the instructor and students enrolled in the class. In no case may the lecture recording or part of the recording be used by students for any other purpose, either personal or commercial. Further, audio or video recording of classes are not permitted without the prior consent of the instructor. Students may not share class Zoom links or invite others who are not registered to view sessions.

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ACKNOWLEDGEMENT

UBC's Point Grey Campus is located on the traditional, ancestral, and unceded territory of the $x^w m \theta k^w \theta \theta w$ (Musqueam) people, who for millennia have passed on their culture, history, and traditions from one generation to the next on this site.

COURSE SCHEDULE

(Subject to change with class consultation)

	Synchronous			
	Or			
Class	Asynchronous	Date	Topic	Assessments due
1	Synchronous	Oct 31	Course Introduction	
2	Synchronous	Nov 2	Basic SQL 1	
3	Synchronous	Nov 7	Basic SQL 2	
4	Synchronous	Nov 9	Database Modelling: ER	
5	Synchronous	Nov 14	Database Modelling: Logical Design	Assignment 1
6	Synchronous	Nov 16	Intermediate SQL 1	
7	Synchronous	Nov 21	Intermediate SQL 2	Assignment 2
8	Synchronous	Nov 23	Normalization + DB Technologies	
9	Synchronous	Nov 28	Workshop/Special Topics	Assignment 3
10	Synchronous	Nov 30	Course Review/ Conclusions	
11	Asynchronous	Dec 4		Assignment 4
	Synchronous	TBD	Final Exam	

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