



## BA 502: Data Management for Analytics Spring 2023

“War is ninety percent information.” – Napoleon Bonaparte, French Military and Political Leader

This course introduces **relational database systems**: the essential knowledge business managers need to know to leverage data effectively. A database is a collection of organized information so it can easily be accessed, managed, and updated. The main topics we cover in this course include:

- Understand the core concept of database systems
- Learn SQL queries to retrieve information from a relational database
- Use SQL to generate and present valuable insights from real-world data

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Class Time/Location	<b>(Section A):</b> MW 10:30 AM ~ 12:00 PM, PCAR 392 <b>(Section B):</b> MW 8:45 AM ~ 10:15 AM, PCAR 392
Review Session	<b>(All sections):</b> Fridays 8:30 AM ~ 9:00 AM, PCAR 392
Office Hour	<b>Instructor:</b> Tuesdays 5 PM –6 PM @ <a href="https://washington.zoom.us/j/97804667673">https://washington.zoom.us/j/97804667673</a> or by appointment
Class Materials	There is no required textbook for this course. All class materials will be posted to Canvas prior to each session.
Software	MySQL (Installed on the Foster Virtual Lab: <a href="https://b-lab.foster.uw.edu/">https://b-lab.foster.uw.edu/</a> )

## Course Requirements

You are responsible for completing each deliverable by its deadline. Deadlines are outlined in the syllabus or supplementary documents accessible through Canvas. For fairness to other students, LATE SUBMISSIONS will get an immediate deduction of 50% of their points and 10% for every 24-hour. Exceptions to these rules will only be made for severe illnesses with a copy of the doctor's note. Your final grade will be determined by the following grading criteria. Detailed requirements and specifications about the course requirements will be provided in class.

Requirements	Grading	Notes
Individual Assignment I	10 %	<ul style="list-style-type: none"> <li>• Individual effort</li> <li>• Accessible through Canvas Quiz</li> </ul>
Individual Assignment II	15 %	
In-class <b>pop</b> quizzes	5 %	<ul style="list-style-type: none"> <li>• Individual effort</li> <li>• 3 ~ 5 quizzes</li> <li>• It is a '<b>pop</b>' quiz, so the dates are not set in advance.</li> </ul>
Group Project	25 %	Group effort
Active Class Participation	10 %	<ul style="list-style-type: none"> <li>• This course is a hands-on class, as SQL is best learned by doing. You will learn new skills in each class through lectures and in-class practices. I expect many of you will volunteer to share your solutions, but I will occasionally cold call to give students more chances to participate. <b>Active participation in class discussions</b> will constitute the participation portion of your grade.</li> </ul>
Final Exam	35 %	Individual effort

## Tentative Course Schedule

Session	Date	Topic	Assignment Due
1	3/27 (M)	Introduction to the course, core database concepts	
2	3/29 (W)	SQL basic SELECT statements *DISTINCT, COUNT, COUNT(DISTINCT) (* ORDER BY, LIMIT)	
3	4/3 (M)	SQL: * Aggregation functions, Computed Columns * GROUP BY/Having	
4	4/5 (W)	SQL: * Date functions * Querying unstructured text (Wildcards)	Group project data approval due (due 11:59 PM, 4/5)
5	4/10 (M)	SQL: * Querying from multiple tables (JOIN)	<b>Individual Assignment I</b> (due 8 AM, 4/10)
6	4/12 (W)	SQL: * Querying multiple levels (Subquery)	Group project data import/troubleshooting checkup
7	4/17 (M)	SQL Drill I: Mini exercise cases	
8	4/19 (W)	SQL drill II: Mini exercise cases	<b>Individual Assignment II</b> (due 8 AM, 4/19)
9	4/26 (W)	Group project presentation	<b>Group Project Slides due</b> (due 8 AM, 4/26)
10	5/1 (M)	Group project presentation	
	5/4 (TH)	In-class Final Exam	<b>Final Exam</b>

### Disclaimer

I hope to cover all of the material on this schedule. If I find that the pace of the class is too quick, or that students are having difficulty with particular sections, I reserve the right to spend more time on specific topics and push subsequent topics to later dates or skip them completely.



## Computer

You need to bring a computer every class. If you do not have a personal laptop, you may borrow a school laptop for the duration of the class from the Learning Spaces office (PCAR 193). To checkout a laptop, you need to bring your Husky card. If you have any questions about laptop rent, please email the Learning Spaces at [pachelp@uw.edu](mailto:pachelp@uw.edu).

## Foster Code of Conduct

By being a student in this course you acknowledge that you are a part of a learning community at the Foster School of Business that is committed to the highest academic standards. As a part of this community, you pledge to uphold the fundamental standards of honesty, respect, and integrity, and accept the responsibility to encourage others to adhere to these standards.

## Religious Accommodations

“Washington state law requires that UW develop a policy for accommodation of student absences or significant hardship due to reasons of faith or conscience, or for organized religious activities. The UW’s policy, including more information about how to request an accommodation, is available at [Religious Accommodations Policy](#). Accommodations must be requested within the first two weeks of this course using the [Religious Accommodations Request form](#).