**UBC Department of Computer Science**
**CPSC 304: Introduction to Relational Databases (September to December 2024)**

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## Course Description

Overview of database systems, ER models, logical database design and normalization, formal relational query languages, SQL, data warehouses and data mining.

## Prerequisites

CPSC 221 or an equivalent, approved course in data structures and discrete mathematics from a previous institution.

Please note that the CPSC department enforces prerequisites. Students without appropriate prerequisites will get a "missing prerequisite" letter near the start of the course. Watch for it in your e-mail if you fall into this category and follow the instructions in the letter to resolve it. If you do not have the prerequisites, you will be dropped from the course.

## Basic Information

### Lectures

Section 101: Tuesday/Thursday 3:30PM to 5:00PM (Pacific) in SCRF 100 or on Panopto (streaming and recording)
Section 103: Wednesday/Friday 3:30PM to 5:00PM (Pacific) in LSK 200 or on Panopto (streaming and recording)

### Office Hours

Online using Zoom or in person, location TBD. The times will be announced shortly after the start of the term and will also be listed on Canvas. All times are in the Vancouver (Pacific) time zone.

### Tutorials (sometimes referred to as "Labs")

Tutorials will start the week of September 16th.

The TAs will conduct tutorials in person. Assuming you have checked with the TAs and it is okay with them, you may attend any tutorial slot. If there are many questions/requests for help directed at the TAs, those who are registered for the tutorial have priority.

The tutorials will be a hybrid of office hours plus a short lesson or a set of instructions. Sometimes your weekly "tutorial" is more along the lines of a traditional tutorial; and at other times, it is more along the lines of a lab. It may also provide a chance for you to ask questions like you would in an office hour. You may need to do some pre-reading or preparation for your tutorial because we probably won't be able to cover all the contents in class; and even if we come close, your tutorial might be scheduled in advance of the corresponding lecture. Be sure

to do the tutorial to prepare for your exams. We expect the exams will line up with material you will have learned in your tutorials.

Be sure to register for one 50-minute tutorial section.

### Communication

**E-mail and E-mail Addresses:** Because this is a very large class, it is simply not practical for the instructor or the TAs to respond to individual e-mail requests (or private postings) of a general nature. Limit such e-mail to items having a personal or confidential nature (e.g., prolonged illness). Lectures, tutorials, office hours, and Piazza are suitable places to ask general questions. You can find the contact information for the teaching team on Canvas.

**Piazza Communication on Exam Days:** To encourage appropriate study habits, we will stop holding office hours / answering questions on the discussion board 24 hours before an exam.

## Covid Safety

**If you're sick, it's important that you stay home – no matter what you think you may be sick with (e.g., cold, flu, other). Current BC guidelines for Covid can be found here:** http://www.bccdc.ca/health-info/diseases-conditions/covid-19/if-you-have-covid-19.

Do not come to class if you are sick, have Covid symptoms, have recently tested positive for Covid, or are required to stay home. This precaution will help reduce risk and keep everyone safer. In this class, the marking scheme is intended to provide flexibility so that you can prioritize your health and still be able to succeed as outlined throughout, including planning to stream all classes and put all recordings on Canvas.

**If I (the instructor) am sick:** I will do my best to stay well, but if I am ill, develop Covid symptoms, test positive for Covid, or am a close contact of someone who has Covid, then I will not come to class. If that happens and I am well enough to teach, then I will teach via Zoom or default to the recording(s) from the other section(s). If not, then class will be cancelled. In either case, I will inform you via Piazza as soon as possible.

Please consider wearing a mask and getting vaccinated: http://www.vch.ca/covid-19/covid-19-vaccine#clinics. The higher the rate of vaccination in our community overall, the lower the chance of spreading this virus. You are an important part of the UBC community. Please arrange to get vaccinated if you have not already done so.

## Textbooks/Clickers

### Required Textbook

Ramakrishnan and Gehrke. Database Management Systems, 3rd Edition, McGraw-Hill, 2003.

Copies of the physical textbook are on reserve for CPSC 304 at the library
https://courses.library.ubc.ca/i.9d5gDN

### Additional Reference Material (optional)

If you want additional reference material, then any book on database systems that has been published in the past 20 years should be fine, providing it deals with relational database systems and the topics described in this outline. However, note that ER notation varies across different systems and textbooks, and you are responsible for using the notation taught in class. One such book is the following:

- Garcia-Molina, Hector; Ullman, Jeffrey D.; and Widom, Jennifer. *Database Systems: The Complete Book*, Prentice-Hall, 2009.

### Clicker

We will use **iClicker Cloud** (also known as iClicker REEF). It allows you to respond to clicker questions with either a mobile device or a computer. It is free. Here are the instructions for students:

https://lthub.ubc.ca/guides/iclicker-cloud-student-guide/

When you register for iClicker Cloud, and you connect your registration to Canvas, then Canvas will automatically pick up your scores.

## Electronic Information Sources

Note the @ugrad.cs.ubc.ca email alias corresponding with your account. This anonymized address may be used to identify you on services potentially located outside of Canada. If you choose not to keep your alias confidential, please note that UBC will proceed on the assumption that you do not object to said services potentially identifying you personally, and that you are consenting to the storage of personal information on servers outside Canada

### Canvas

Canvas is UBC's standard Learning Management System. We will use Canvas to host most of the online materials, including lectures and quizzes, for this course. This is also where your grades will be posted. Canvas allows us to post lecture slides, pre-recorded lectures, recorded lectures, handouts, practice exercises, solutions, grades, group memberships, tutorials, project submissions, etc. for this course.

Please download the current slides and view the short recordings (if any) that your instructor has made for the next lecture, before coming to class. Please be advised that you are responsible for all material presented in the lectures, and in the appropriate parts of the textbook, assignments, and tutorials. We intend to run the lectures with a mix of interactivity:

clicker questions and in-class exercises. We also want you to be prepared for class by viewing selected screencasts beforehand.

UBC's IT Services group is hosting Canvas. If you don't already have a Campus-Wide Login (CWL) account, you should visit https://it.ubc.ca/services/accounts-passwords/campus-wide-login-cwl to get one. All registered students for CPSC 304 who have a CWL ID will automatically have their CWL ID linked to the CPSC 304 Canvas pages by the time the course starts. If you are taking other courses that use Canvas, then your CWL ID will be linked to those courses, too.

## Piazza

Piazza will host our course discussion board (also called a "bulletin board"), and it is ***required reading*** for this course. **It is your responsibility to read it at least once per day**. Questions about the CPSC 304 course content (e.g., lecture, textbook, assignments, Web pages) can be posted on the Piazza discussion board, *but please check to make sure that your question hasn't already been asked or answered*. In previous terms, students have asked the same questions over and over. Remember, you can always re-read Piazza notes that you've already seen, and you can search for keywords within Piazza.

The TAs and instructors will be monitoring and responding to questions daily, but students are also encouraged to respond to each other's postings and questions. Answering questions is a good way test your understanding of the material. *Do not post code or solutions* on the bulletin board (other than perhaps small fragments, if necessary). Problems with Canvas itself (i.e., other than with the content of the CPSC 304 web pages) should be directed to help@itservices.ubc.ca. Problems with undergrad accounts, servers, or hardware problems in the lab should be directed to help@ugrad.cs.ubc.ca.

If you encounter any technical problems with Piazza, or if you have feedback for the Piazza developers, you can e-mail them at team@piazza.com.

**Piazza registration instructions** are found on Canvas – click on the Piazza tab on the LHS. Piazza does *not* automatically use your Canvas-associated e-mail as your Piazza e-mail. When signing up for Piazza for the first time, you can choose what e-mail address to use, and you can change it anytime.

- First, a UBC legal/privacy disclaimer: "If you decide to use Piazza in your course, you are required to use the Canvas integration [done] to ensure that its use is compliant with the Freedom of Information and Protection of Privacy Act (FIPPA). The Canvas integration link directs students to the proper Piazza course and masks the student's identity before it is sent to the site. To comply with BC privacy legislation, students will need to create a Piazza account and agree to the terms of use the first time they use the tool. While Piazza adheres to strict U.S. privacy regulations (FERPA), UBC cannot guarantee the security of student's private details on servers outside of Canada. Students should be reminded to exercise caution whenever using personal information, and that they may use a pseudonym to protect their privacy if they have concerns."

When signing up for Piazza, use whichever email address makes you the most comfortable (whether that is your cs_id@ugrad.cs.ubc.ca) or a something else. If you choose an email with a pseudonym, please keep it school appropriate and don't pick the name of a celebrity, sports star, other student, etc. You will need to ensure that your account is associated with a UBC affiliated email address (this can be one or more of your ugrad.cs.ubc.ca, students.cs.ubc.ca, student.ubc.ca email addresses). You will find the link to the Piazza course on Canvas.

### Panopto

Both sections will be streamed and recorded via Panopto. We will try to release the recording in a reasonable amount of time but the actual release time per recording will vary.

Disclaimer: If the technology fails (e.g., the stream stops halfway during class, the recording fails etc.), a new recording may **not** be made to replace whatever is missing.

### Oracle

We will use Oracle as our default DBMS. It is hosted by the Department of Computer Science. Oracle's command line interface for entering and executing SQL statements is called SQL*Plus. To access Oracle, you will need to use a host programming language. We will provide support for both PHP and JavaScript. Additionally, some tutorial notes are available for Java/JDBC and PHP. You can use any relational DBMS and programming language that you wish, providing your group members agree; but we can't support everything, so, your team is on its own for support for everything other than Oracle, PHP, and JavaScript. Some of the TAs might be familiar with other DBMSs and platforms, but don't count on it.

## Tentative Topics

A list of the learning outcomes for each topic can be found on the course website.

Topic-level learning goals are useful for self-evaluation and preparing for exams. The lecture slides will contain the topic-level learning goals. These are useful for self-evaluation and when studying for exams. They also give you (and future employers) a more detailed view of the course's contents than a typical calendar entry or a list of topics would.

| Topic | Subtopics | Textbook Reference |
|---|---|---|
| Introduction | Database Objects, DBMS Models, Abstraction Levels, System Structure, DBA Tasks | Chapter 1 |
| Database Design (Data Modeling) | Entity-Relationship Diagrams, Logical Database Design, Formal Structure of the Relational Model, SQL's Data Definition Language, Keys, Integrity Constraints including Referential Integrity | Chapters 2 & 3 |
| Schema Refinement and Normalization | Functional Dependencies; Redundancies; 1NF, 2NF, 3NF, & BCNF Normal Forms; Decomposition, Lossless-Join, and Synthesis | Chapter 19 |
| Formal Query Language | Relational Algebra | Chapter 4 |
| Structured Query Language (SQL) | Basic Queries, SQL's Data Manipulation Language, Set Operations, Null Values, Ordering & Aggregation, Modification, Embedded vs. Dynamic SQL, Cursors, JDBC | Chapter 5 & 6 |
| Query Languages (cont.) | Datalog | Chapter 24 |
| Data Warehousing | Introduction to Data Warehousing and OLAP; the ETL Process; Star vs. Snowflake Schemas; Aggregation and Hierarchies; Data Cubes; Microsoft's SQL Server and SQL Server Analysis Services; View Selection and Materialization | Chapter 25 |
| Data Mining | The KDD Process (Knowledge Discovery in Databases), Frequent Itemsets, Association Rules, and maybe Frequent Pattern Trees (FP-Trees) | Chapter 26 |

# Evaluation

The final grades will ***tentatively*** be calculated as follows. We reserve the right to change this grading scheme in case some unforeseen events come up beyond the instructors' control. If we do make a change, we will certainly inform you.

**For all graded work, ambiguous, unreadable, or blank answers will be considered incorrect.**

| Component | Weighting |
|---|---|
| Syllabus Quiz | 1% |
| In-Class Exercises | 4% |
| Clickers | 4% |
| Project | |
| Milestone 0: Form a group | 0% |
| Milestone 1: Project proposal and ER diagram | 4% |
| Milestone 2: Definition of relations and SQL DDL; normalization complete; proposed queries in English submitted | 7% |
| Milestone 3: Project check-in | 3% |
| Milestone 4: Project is fully implemented | 2% |
| Milestone 5: Project demo | 8% |
| Milestone 6: Individual and Peer Assessment | 3% |
| Midterm: Tuesday, October 22 @6pm | 25% |
| Final Exam (Date to be announced!) | 39% |

## Minimum Passing Criteria

To pass the course, you must pass a combination of the midterm the final exam (as weighted above) **and** achieve an overall grade of 50% or better. If you fail the combination of the midterm and the final exam, you will receive as your course grade the lower of the normally computed grade and 45%.

## In-Class Exercises

The in-class exercises will be assigned during the scheduled class times. We'll take the best 80% of the days to allow for the odd missed class. The in-class exercises will be marked on a 0/1/2 point scale for effort and completion—not necessarily for the correct answers. These will be handed in, on Canvas, by 10PM the day after the last date that an in-class exercise is started in class. Note that if you always turn it in by 10pm the day after it is released, you'll never be late. We will not accept late submissions for in-class exercises. It is your responsibility to ensure you uploaded the correct file for submission. We will only grade the last submission of an assignment, and we will not look in other places on Canvas for your submission.

Disclaimer: We might tweak the percentages for the in-class exercises depending on how many of each we do, and what kind of unexpected technical issues may occur.

### Clickers

Clickers will be graded for participation only. As with the in-class exercises, we'll take the best 70% of the points to allow for the odd missed class.

We will calculate the better of your clicker grade per section for the entire term and use that. We cannot support switching clicker grades for individual lectures.

Be aware that the streaming service often is delayed by up to two minutes. Thus, streaming the course and using iClicker will probably not work well.

## Project

Detailed information about the project can be found on Canvas.

### Project Milestones

There are six project milestones. Certain milestones may require you to submit deliverables earlier than when you meet with your TAs. It is your responsibility to read through the milestone description well ahead of schedule to account for these types of requirements. **We especially recommend carefully reading all descriptions and rubrics for Milestones 4 and 5 before beginning implementation.** Refer to Canvas for more details.

**Milestone Submission Rules**

Deliverables which are submitted via a commit to the course provided repository are still subject to late penalties. Your TAs will be checking the exact commit times and work that is submitted past the stated deadline will be subject to late penalties.

*Milestones 1, 2, 4, and 6*:

- Will not be accepted 48 hours after the due date and time. A grade of 0 will be assigned.
- Will be subject to a 25% deduction per portion of a day (i.e. deduction applies whether the delay is 2 minutes late or 23 hours late).
    - The 25% deduction is calculated based on the full value of the project deliverable. For example, if a deliverable is worth 20 points and is handed in a day late, a 5 point deduction would be applied.

*Milestone 3*:

- The project check in meeting is mandatory. Note that the check in will occur AFTER the milestone itself is due to allow for the TA to have time to look at your milestone document. Your TAs are also students, and it would be deeply unfair to them to give them work last minute.

  Please be careful to choose a time that will work for all group members. If a student misses the check in without documentation supporting the absence, we reserve the right to give a 0 for their milestone 3 grade and apply a penalty of 25% to their milestone 4.
    - Neglecting to hand in a portion of the required deliverables by the deliverable will be subject to a 25% deduction per portion of a day as for the Milestone 1, 2, 4, and 6 rules.
    - The 25% deduction is calculated based on the full value of the project. For example, if a deliverable is worth 20 points and is handed in a day late, a 5 point deduction would be applied.
- Your project mentor is not responsible for ensuring that you have signed up for a meeting. Instructions on how to sign up for a meeting will be posted on Piazza and it is your responsibility to ensure that the group has signed up for a time.
- If you fail to show up to the project check in meeting or cancel with less than 1 business day of notice, you will be considered as choosing to forfeit the marks associated with milestone 3. You will receive a 0 for the milestone. If an emergency is the cause of your failure to attend, you will need to contact the course coordinator for approval to schedule a new meeting. The course coordinator may choose to ask for documentation.
- If you cancel your meeting, your project mentor is not responsible for ensuring that you will be able to meet with them sometime before the deadline for milestone 3 passes. Your TAs are also students and they too are very busy. It would be unfair to expect them to drop their other commitments for a last-minute meeting. They will, of course, try their best to accommodate but there is a chance that you will not be able to find another suitable time for your milestone 3 meeting and will thus, forfeit the marks associated with milestone 3. Deliverables that are submitted past the deadline stated in the deliverable description will be given a 25% penalty per portion of a day it is late. Deliverables will not be accepted after the check-in meeting has started.

*Milestone 5*:

- Students who are absent for the project demo will be given a 0 unless documentation supporting the absence is provided within one week of the demo date. Please be careful to choose a time that will work for all group members.
- If the provided documentation is accepted, the implementation portion of the project will be re-weighed to include the value of the project demo.

## Examinations

There will be one midterm and a final examination. We will use the "10% rule" for the midterm: If your grade on the final is X, and X is more than 10% higher than your midterm grade, we will count your midterm grade as X-10.

Examples:

| Original midterm grade | Final exam grade | midterm grade used in overall course grade calculation |
|---|---|---|
| 55% | 95% | 85% (because 95-10 = 85 and is greater than 55) |
| 75% | 80% | 75% (because 75 > 80-10) |
| 80% | 55% | 80% (because 80 > 55) |

Each exam will be on paper, closed book and closed notes with no calculators allowed; exams are to be completed individually. You are NOT permitted to access any of the course materials, including your notes, during the exam. You are also NOT to communicate with anyone about the exam during the scheduled write time or after the examination – you are to work independently. Communication with other students (written, text, verbal, etc.) is not permitted and will constitute Academic Misconduct. If you violate these conditions you have engaged in Academic Misconduct and will be subject to the consequences as determined by the university.

If you have an unplanned absence (e.g., due to illness), you may provide either documentation or fill out a self-declaration form. However, note that for a second or subsequent request for academic concessions resulting from acute illness, we will refer you to your academic advising office, graduate supervisor, or graduate advisor. The final covers more topics than the midterms.

**The midterm will be held on Wednesday, October 22 at 6:00pm.** We will have one makeup midterm slot that we will hold within 24 hours of the midterm. Students who wish to use this makeup midterm slot MUST follow the steps laid out in class and on Piazza to register in advance for this makeup session. For those who cannot make that time, fail to register for the makeup setting, are sick, or miss the midterm for any other reason, we will renormalize your final exam score to the mean and standard deviation of the midterm and count this as your

midterm grade (i.e., if you scored 2 standard deviations above the mean on the final exam, we would count 2 standard deviations above the mean on midterm as your midterm grade).

The final examination will be written on a date in December to be determined by the University. Please do not schedule any travel plans prior to the announcement of the final exam date; travel is not an accepted reason for the delay or deferment of a final exam. If you cannot write the final exam, then you must provide documentation (e.g., a doctor's note) to your home faculty office within 48 hours of missing the exam. For example, if you are in Science, then it will be the Faculty of Science; if you are in Engineering, then it will be the Faculty of Applied Science; and similarly for Arts, Commerce, etc. Assuming the faculty advising office approves of the deferment request, you will write an exam with the subsequent course offering .

Important note: Your home faculty office may not allow you to write a deferred final exam (even if you have a doctor's note) if your term work is incomplete (e.g., missing midterm, missing classes or tutorials, or incomplete project).

Learn more and find the application online:
https://science.ubc.ca/students/advising/concession

## Regrading

Unless a different deadline is explicitly given, regrade requests will be accepted up to one week after the grades are released. When a regrade request is submitted, we reserve the right to regrade the whole deliverable/exam – not just a portion of it. You can submit non-exam related regrade requests here; keep an eye on Piazza for instructions on how to submit a regrade request for an exam.

Things to keep in mind about regrade requests:

- A regrade request is **not** an opportunity for you to argue about the grading scheme. It is a chance for you to address situations where the grading scheme was applied incorrectly to your work. Regrade requests that debate the validity of the grading scheme (e.g., this item should not be worth this number of points or this item should not be included in the rubric) will be discarded without warning.

- Issues already discussed on Piazza and for which the course team has declared that the grading stands should not be brought up again in a regrade request.

- The regraded mark is final– even when the regraded mark is less than the original grade. You cannot choose to withdraw a regrade request.

- If we receive multiple regrade requests for an assessment, we will only consider the very last request that was submitted.

- When submitting a regrade request, we will ask you for an explanation of why you feel the need to submit the request. We are not looking for an essay. We want to have a meaningful discussion with you about why particular elements of your answer deserve to be awarded points based on the grading scheme. Unless the grading error is very obvious, it is generally in your best interest to spend some time on answering this part of the regrade request.

- Regrade requests received with reasons that do not discuss the answer with relation to the grading scheme (e.g., “I tried really hard and this grade does not reflect my effort” or “I don’t agree”) may be discarded without warning.

- Late regrade requests are not accepted.

- Incomplete regrade requests will be discarded.

- We will only start processing regrade requests after submission deadline has passed.

- Regrade requests submitted via the incorrect avenue (e.g., through email) will not be considered.

- Regrade requests that violate these rules are subject to a 5% additional penalty. The deduction is calculated based on the full value of the item being regraded.

## Illness and late policy

Do contact your instructor via email immediately when you know you will miss a graded assessment (e.g., exam/project).

No late projects will be accepted without a valid reason, such as illness. If you think you have a valid reason, please contact the instructor directly. Because you can earn 100% even if you miss some, we typically do not accept excuses for missed in-class exercises or clicker questions. (That said, if you have concerns, please talk to us!)

## Collaboration/Cheating Policy

Use of generative artificial intelligence tools to complete coursework in this course is prohibited in all cases. Use of these tools is considered an unauthorized means to complete an examination or other assignment or assessment and would be considered academic misconduct.

**UBC's Policy on Academic Integrity**:

> "Academic honesty is essential to the continued functioning of the University of British Columbia as an institution of higher learning and research. All UBC students are expected to behave as honest and responsible members of an academic community. Breach of those expectations or failure to follow the appropriate policies, principles, rules, and guidelines of the University with respect to academic honesty may result in disciplinary action."
> http://www.calendar.ubc.ca/Vancouver/index.cfm?tree=3,286,0,0#15620

A more detailed description of academic integrity, including the University's policies and procedures, can be found in the UBC Calendar at:
http://www.calendar.ubc.ca/Vancouver/index.cfm?tree=3,54,111,0

Using ChatGPT or a similar system on any work that you turn in also constitutes a violation of academic integrity.

We believe that you will learn at least as much from each other as you will learn from the teaching staff. Therefore, we want to encourage collaboration without compromising a fair grading scheme (as described in the department's policy on collaboration).

In most instances, we will follow the "Gilligan's Island" (GI) rule of collaboration. That means that you can collaborate as much as you want with whomever you want subject to three restrictions:

1. You must acknowledge everyone with whom you collaborated on your submission.
2. You may not take a record of any sort away from the collaboration. (So, erase all whiteboards, delete all e-mail, recycle all paper, etc.)
3. You must spend at least an hour after the collaboration and before working on your own submission watching Gilligan's Island or performing the intellectual equivalent. In other words, do something so distracting and inane that you must have learned anything you can reconstruct afterward.

The exceptions to this rule are:

- On the project you may collaborate with your group. However, you will be asked to define how the collaboration worked. Note that collaboration with people outside your team still falls under full GI rules.
- Collaboration with the instructor and TAs (including discussion board posts) is excluded from the GI rules.

You may not collaborate at all on the midterm exams, the final exam, or any work that we explicitly state must be done individually. **Don’t look for loopholes to cheating. Use common sense and don’t cheat.**

You may be unable to destroy some records you create during collaborations (e.g., posts to the Piazza discussion board). In such cases, you should try to follow the spirit of the rule: exercise caution in the information you share (e.g., don't provide answers to problems but rather discuss similar problems or describe concepts).

Finally, use common sense. For example, carefully memorizing someone else's SQL query and then regurgitating it an hour later is still plagiarism and cheating.

## Other Important Notes and Links

**Equity & Inclusion**

We aim to build a community where equity and inclusion are embedded in all aspects of campus life. If you require assistance related to issues of equity, discrimination or harassment please contact the Equity & Inclusion Office:

Brock Hall, Room 2306
604-822-6353
info@equity.ubc.ca
https://equity.ubc.ca

**Health & Wellness**

Health and wellness, both physical and mental, are important for academic success. If you are having difficulty with your studies, feel overwhelmed, or are experiencing distress, UBC provides many resources to help. You can also find tips on how to approach a friend who may be experiencing difficulties. For more information, please visit:

https://students.ubc.ca/health-wellness

If you are seriously ill or are dealing with a significant issue (e.g., the death of a close family member) that may prevent you from performing well in your courses, please contact your instructor or your home faculty office, as soon as possible.

If you face similar circumstances for your final exam, please talk to your Faculty advising office *before* you take the exam. They will assist you in determining an appropriate course of action. Please note that different Faculties handle requests for academic concession in different ways. Links to further information for the Faculties of Arts, Science and Commerce are provided below:

Science: Exam Issues
Arts: Academic Concession
Sauder: Academic Concession

**Centre for Accessibility (formerly Access & Diversity)**

The Centre for Accessibility provides support for students with disabilities, chronic medical conditions, and other challenges. If this applies to you and you require academic accommodations to meet course objectives, please contact the Centre for Accessibility:

Brock Hall, Room 1203.
604-822-5844
accessibility@ubc.ca
https://students.ubc.ca/about-student-services/centre-for-accessibility

**AMS Safewalk**

If you find yourself in a situation where you do not feel safe travelling alone across campus at night and would like someone to accompany you, please contact the AMS Safewalk program by:

Calling 604-822-5355
Using a campus Blue Phone and asking for Safewalk
Dropping by their office in the Nest, Level 1, Room 1314

See also http://www.ams.ubc.ca/services/safewalk/

**Finances for Technology**

If you have financial difficulties acquiring the technology you need to participate fully in this course, please contact your Enrolment Services Advisor: https://students.ubc.ca/about-student-services/enrolment-services-advisors

Lastly, the **Faculty of Science** maintains a list of **resources** that students might find useful: https://science.ubc.ca/students/resources/

**Policies and Resources to Support Student Success**

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 and cultural 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 here: https://senate.ubc.ca/policies-resources-support-student-success

## Acknowledgements

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