

Database Management Systems

CISC 332/CMPE 332

Winter 2025

Instructional Team

Professor

Wendy Powley: wendy.powley@queensu.ca

Teaching Assistants (emails are on ONQ)

Vinicius Porfirio Purgato (Head TA)

Daniel Joseph

Nolan Ling

Amanda Shum

Jeevan Narewal

Yuanqi Liang

Christian D'Souza

Ricardo Chen

Isaiah Wuthrich

Shuanglong Zhu

Maleesha Wanniarachchige

Office Hours

Wendy Powley – Wednesday 11:30AM-12:30PM in Goodwin 632

TA Office Hours: TBD (will be posted on ONQ)

Intended Student Learning Outcomes

- Apply database design techniques and tools to create a database schema and database instance for an application.
- Apply an application design method and development tools to create a web application to support users in querying and manipulating the database for an application.
- Compose queries on a database in both SQL and the relational algebra.
- Assess the quality of database schemas and queries.
- Apply methods to improve the performance and security of a database application.

Course Outline

Data models: relational, entity-relationship. Relational query languages: relational algebra and SQL. Relational database design. Application interfaces and embedded SQL. Storage and indexing. Security.

Textbooks/Readings

No text is required. A suggested text is Database System Concepts, Silberschatz, Korth, Sudarshan 6th Edition. Please note that I have not ordered a book for this class due to low uptake in the past. Any introductory text on Database Management Systems will probably suffice if you really want a text. The materials posted online should be enough to learn the course material.

Grading Scheme

Software Setup	5%
Project Part 1: Entity Relationship Diagram	10%
Project Part 2: Relational Implementation	10%
Project Part 3: Application & Video Demo	15%
Midterm Exam	20%
Final Exam ** you must pass the final (50%) to pass the course	40%

Grading Scheme and Grading Method

All components of this course will receive numerical percentage marks. The final grade you receive for the course will be derived by converting your numerical course average to a letter grade according to Queen's Official Grade Conversion Scale:

Queen's Official Grade Conversion Scale

Grade	Numerical Course Average (Range)
A+	90-100
A	85-89
A-	80-84
B+	77-79
B	73-76
B-	70-72
C+	67-69
C	63-66
C-	60-62
D+	57-59
D	53-56
D-	50-52
F	49 and below

Late Policy

Late assignments are not accepted beyond 24 hours. All assignments will have a 24 hour grace period for which there will be no penalty. You do not need to ask for this extension. Assignments are not accepted beyond this point and will not be marked.

Students with accommodations must request extensions prior to the assignment deadline. Extensions are not automatically granted.

Midterm and Final Exam

The midterm will be written in person during scheduled class time on **Wednesday February 26 2024 (10:30AM)**.

The final exam will be scheduled during the regular exam period in April. It will be a 2 hour exam and cover all course material.

If you require academic considerations, you **MUST** submit your application for considerations prior to the test date/time and let the instructor know that you have done so. No considerations will be granted to those who apply after the test date.

There will be no make-up midterm. Those who successfully apply for considerations will have the marks for the midterm shifted to the final exam.

Consideration requests must be made **prior to the midterm/final date/time**. I will not grant considerations to those applying after the date/time of the test. This applies to ALL students, regardless of faculty policies.

You must pass the final exam (with 50% or more) to pass the course.

Course Format

In-person classes will be held 3 times per week. This will be your main source of learning. Slides (if used) will be posted, but classes will NOT be recorded.

Each week you will find on the corresponding ONQ page where information will be posted.

The instructor will hold office hours on Wednesdays from 11:30AM to 12:30PM in Goodwin 632 starting in the second week of class.

TAs will hold office hours once per week at a date/location to be announced. TA office hours will begin the second week of classes.

Accommodation Requests

Students with accommodation letters should refer to the Ventus system regarding the location for their end of term test.

Please note that although your letter of accommodation may allow for extensions on course deliverables, these must be requested in advance of the deadlines. I do not grant requests for extensions after the deadline has passed. Extensions as outlined in your accommodation letter are NOT automatic. You must request and be granted an extension. Due to the scaffolding nature of the project, it may not be possible to grant a 7 day extension. Ample time is allotted for all assignments in this course so there should be no need for extensions.

Policy on Assignment Remarking

If you feel that there has been an error in the marking of your assignment, you may request a remark within the window of opportunity. The window of opportunity begins 24 hours after the email has been sent indicating that marks are posted. From this time, you have 72 hours in which to request a remark. So, if it is announced Monday at 12:00 noon that marks are available, you may send a request for remarking during the period beginning Tuesday at 12:00 noon to Friday at 12:00 of the same week. Requests received outside this time period will be ignored.

Please take the following steps when requesting a remark:

1. Write a polite, detailed explanation of the problem. This can be done via a kindly written email.
2. Submit the email to the instructor (wendy.powley@queensu.ca) within the specified time frame.

Do not contact the TA regarding re-marks unless instructed to do so by the instructor.

Please note that a re-mark means that the entire assignment will be remarked by the instructor. Your mark may go up, stay the same, or be reduced as a result of the remark. The exception to this rule is for mark addition errors.

Equity, Diversity and Inclusion (EDI) Statement

I will work to promote an anti-discriminatory environment where everyone feels respected, valued and welcome. It is my intent to present materials and activities that are respectful of the diversity of students and experiences in this classroom. Students in this class are encouraged to speak up and participate during class meetings. Because the class will represent a diversity of individuals, beliefs, backgrounds, and experiences, every member of this class must show respect for every other member of this class.

Statement on Academic Integrity

Queen's students, faculty, administrators and staff all have responsibilities for supporting and upholding the fundamental values of academic integrity. Academic integrity is constituted by the five core fundamental values of honesty, trust, fairness, respect and responsibility (see www.academicintegrity.org) and by the quality of courage. These values and qualities are central to the building, nurturing and sustaining of an academic community in which all members of the community will thrive. Adherence to the values expressed through academic integrity forms a foundation for the "freedom of inquiry and exchange of ideas" essential to the intellectual life of the University.

Students are responsible for familiarizing themselves with and adhering to the regulations concerning academic integrity. General information on academic integrity is available at Integrity@Queen's University, along with Faculty or School specific information. Departures from academic integrity include, but are not limited to, plagiarism, use of unauthorized materials, facilitation, forgery and falsification. Actions which contravene the regulation on academic integrity carry sanctions that can range from a warning, to loss of grades on an assignment, to failure of a course, to requirement to withdraw from the university.

The use of ChatGPT or other AI tools to generate solutions in this class is strictly prohibited and will be considered a breach of academic integrity.

Automatic Copyright of Course Materials

As recommended by the University, this is a reminder to students of copyright: In accordance with Canadian statutory and common law, any written or visual material that the instructor produces is automatically

copyrighted. The instructor may pursue any violator of that copyright whether or not a notice is placed on the course material. Copyright does not dampen any ordinary use that colleagues or students make of the material.