# COMP 3005 A & B Database Management Systems Winter 2025

Instructor: Mengchi Liu Office Location: HP5364

Email: mengchi@scs.carleton.ca Class Location: Check Carleton Central

Office Hour: W4:00 - 5:00pm 5364 HP

Class times: Section A: MW10:05 – 11:25am

Section B: MW 2:35 – 3:55pm

Prerequisites: COMP 1805 with a minimum grade of C-, and either 2402 or (SYSC 2004 and

SYSC 2100)

Teaching Assistants: Information about them will be provided once the course begins.

Course Website: https://carleton.ca/brightspace/

Textbooks:

1. Ramez Elmasri and Shamkant B. Navathe: Fundamentals of Database Systems. Seventh Edition. Available online.

2. Suzanne W. Dietrich: Understanding Relational Query Languages. Prentice Hall, 2001 (optional)

SYSTEMS

Delegational Dutabase Outputs

Languages

Software: Oracle Database Management System on Openstack VM

#### Course Description:

Introduces students to concepts of database management systems, database models, query languages, database design, normalization theory, and physical data organization. Course topics include:

- Introduction
- Relational Model
- Query Languages
- Entity-Relationship Model (ER)
- Extended Entity-Relationship Model (EER)
- ER/EER to Relation Mapping
- Normalization Theory
- Extended Relational Model
- Physical Data Organization

#### Assessments

Assignments: best 5 out of 6	25%
Midterm Exam (Feb 26 <sup>th</sup> class time)	25%
Final Exam	50%

### Notes:

- 1. Collaborating on these assignments is strictly disallowed.
- 2. If you need help, please see a TA or the instructor during their office hours.
- 3. Posting assignment solutions on the discussion board before the due date is prohibited.

- 4. Assignments must be submitted to Brightspace to be graded. No late assignments will be accepted, nor will assignments submitted by email or in other forms. TAs are not allowed to accept assignments directly.
- 6. If you have any concerns about your assignment and midterm marks, you must address them with the TA who marked the work. Only if the TA does not resolve the issue to your satisfaction should you escalate the matter to the instructor. Any concerns must be raised within two weeks of the marks being posted. After the two weeks, no requests for remarking will be considered.
- 7. The midterm and final exams will be conducted using e-proctoring services provided by Scheduling and Examination Services. This will require the use of webcams, microphones, and smartphones. For more details, please visit <u>carleton's e-Procturing page</u>.
- 8. The midterm exam will cover all material in class up to and including the last lecture before the exam.
- 9. The final exam will covers all material taught throughout the course.
- 10. Self-declaration forms will not be accepted as valid documentation under any circumstances.

## Undergraduate Academic Advisors

The Undergraduate Advisors for the School of Computer Science are available in Room 5302HP; or by email at <a href="mailto:scs.ug.advisor@cunet.carleton.ca">scs.ug.advisor@cunet.carleton.ca</a>. The undergraduate advisors can assist with information about prerequisites and preclusions, course substitutions/equivalencies, understanding your academic audit and the remaining requirements for graduation. The undergraduate advisors will also refer students to appropriate resources such as the Science Student Success Centre, Learning Support Services and Writing Tutorial Services.

## **SCS** Computer Laboratory

Students taking a COMP course can access the SCS computer labs. The lab schedule and location can be found at: <a href="https://carleton.ca/scs/tech-support/computer-laboratories/">https://carleton.ca/scs/tech-support/computer-laboratories/</a>. All SCS computer lab and technical support information can be found at: <a href="https://carleton.ca/scs/tech-support/">https://carleton.ca/scs/tech-support/</a>. Technical support staff may be contacted in-person or virtually, see this page for details: <a href="https://carleton.ca/scs/tech-support/contact-it-support/">https://carleton.ca/scs/tech-support/contact-it-support/</a>.

## **University Policies**

For information about Carleton's academic year, including registration and withdrawal dates, see Carleton's Academic Calendar.

Pregnancy Obligation. Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit <u>Equity Services</u>.

Religious Obligation. Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit <a href="https://carleton.ca/equity/focus/discrimination-harassment/religious-spiritual-observances/">https://carleton.ca/equity/focus/discrimination-harassment/religious-spiritual-observances/</a>.

Academic Accommodations for Students with Disabilities If you have a documented disability requiring academic accommodations in this course, please contact the Paul Menton Centre for Students with Disabilities (PMC) at 613-520-6608 or <a href="mailto:pmc@carleton.ca">pmc@carleton.ca</a> for a formal evaluation or contact your PMC coordinator to send your instructor your Letter of Accommodation at the beginning of the term. You must also contact the PMC no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with your instructor as

soon as possible to ensure accommodation arrangements are made. For more details, visit the <u>Paul</u> Menton Centre website.

Survivors of Sexual Violence. As a community, Carleton University is committed to maintaining a positive learning, working and living environment where sexual violence will not be tolerated, and survivors are supported through academic accommodations as per Carleton's Sexual Violence Policy. For more information about the services available at the university and to obtain information about sexual violence and/or support, visit: <a href="mailto:carleton.ca/sexual-violence-support">carleton.ca/sexual-violence-support</a>

Accommodation for Student Activities. Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation must be provided to students who compete or perform at the national or international level. Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, see the policy.

Student Academic Integrity Policy. Every student should be familiar with the Carleton University student academic integrity policy. A student found in violation of academic integrity standards may be awarded penalties which range from a reprimand to receiving a grade of F in the course or even being expelled from the program or University. Examples of punishable offences include: plagiarism and unauthorized co-operation or collaboration. Information on this policy may be found <a href="https://examples.com/here/beta/figures-parameter-student-st

Plagiarism. As defined by the Senate, "plagiarism is presenting, whether intentional or not, the ideas, expression of ideas or work of others as one's own". Such reported offenses will be reviewed by the office of the Dean of Science. More information and penalty guidelines can be found here: <a href="https://science.carleton.ca/students/academic-integrity/">https://science.carleton.ca/students/academic-integrity/</a>. Please note that content generated by an unauthorized A.I.-based tool is considered plagiarized material.

Unauthorized Co-operation or Collaboration. Senate policy states that "to ensure fairness and equity in assessment of term work, students shall not co-operate or collaborate in the completion of an academic assignment, in whole or in part, when the instructor has indicated that the assignment is to be completed on an individual basis". Please refer to the course outline statement or the instructor concerning this issue.