

Carleton University  
School of Computer Science  
COMP 5118  
**Trends in Big Data Management**  
**Fall 2023**

**Instructor:**

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HP 5433

**Lectures:** Tuesday: 11:35 AM – 2:25 PM (in-person).

**Textbook:**

There are no textbooks used in this course. Instead, we have a list of papers that we will discuss in this course. This list can be found on the course web page [here](#).

**Prerequisites:**

COMP 3005, COMP 1805 or MATH 1800, plus COMP 2402 or (SYSC 2004 and 2100).

**Course Description:**

This is a grad-level course for 4<sup>th</sup> year students, MSC and PhD students in Carleton University and the University of Ottawa. Each year we focus on some research areas in the field of data management. These research areas change from one term to another based on the popularity of these research areas at the time. This term, we focus on the following topics: Social Media Data, Text-to-SQL, Internet of Things, Entity Matching, Data Lakes, Sentiment Analysis, Anomaly Detection, Time Series, AI Applications in Geospatial Data, AI Applications in Football, AI Applications in Medical Data, Question Answering, Database Tuning, Data Discovery, Knowledge Graphs, and Document Search.

**Course Website:** [https://people.scs.carleton.ca/~ahmedelroby/COMP5118\\_F23/](https://people.scs.carleton.ca/~ahmedelroby/COMP5118_F23/)

**Attendance**

Class attendance is important (class participation). No attendance will be taken.

## Assessment Scheme

The grading scheme along with all the due dates of all the submissions can be found on the course [website](#). Here is the grading scheme table:

Project	45%
Presentations	20%
Paper Reviews	20%
Class Participation	15%

## Undergraduate Academic Advisors

The Undergraduate Advisors for the School of Computer Science are available in Room 5302HP; or by email at [scs.ug.advisor@cunet.carleton.ca](mailto:scs.ug.advisor@cunet.carleton.ca). 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.

## Graduate Academic Advisors

The Graduate Advisors for the School of Computer Science are available in Room 5302 HP; or by email at [grad.scs@carleton.ca](mailto:grad.scs@carleton.ca). The graduate advisors can assist with understanding your academic audit and the remaining courses required to meet graduation requirements.

## SCS Computer Laboratory

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

## University Policies:

- **Academic Accommodations**

Carleton is committed to providing academic accessibility for all individuals. Please review the academic accommodation available to students here: <https://students.carleton.ca/course-outline/>.

- **Academic Integrity**

**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 sanctioned with penalties which range from a reprimand to receiving a grade of F in the course, or even being suspended or expelled from the University. Examples of punishable offences include plagiarism and unauthorized collaboration. Any such reported offences will be reviewed by the office of the Dean of Science. More information on this policy may be found on the ODS Academic Integrity page: <https://carleton.ca/registrar/academic-integrity/>.

**Plagiarism.** As defined by Senate, "plagiarism is presenting, whether intentional or not, the ideas, expression of ideas or work of others as one's own". Such reported offences will be reviewed by the office of the Dean of Science. More information and standard sanction guidelines can be found here: <https://science.carleton.ca/students/academic-integrity/>.

**Unauthorized 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".