Carleton University
School of Computer Science
COMP 5118
Trends in Big Data Management
Winter 2022

Instructor:
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HP 5433

Lectures: Tuesday: 11:35 AM – 2:25 PM

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 MSC and PhD students in Carleton University and the
University of Ottawa. Each year we focus on some research areas in the general field of
data management. These research areas change from one term to another based on how
hot these research areas are. This term, we focus on the following topics: Question
answering, knowledge graphs, data cleaning, data integration, graph processing, data lake
management, and applications of AI in healthcare, geospatial data, and sports.

Attendance
Class attendance is important, as you will be responsible for all subjects discussed in
class. No attendance will be taken.

Marking Scheme:

<table>
<thead>
<tr>
<th>Project</th>
<th>45%</th>
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<tbody>
<tr>
<td>Presentations</td>
<td>20%</td>
</tr>
<tr>
<td>Paper Reviews</td>
<td>20%</td>
</tr>
<tr>
<td>Class Participation</td>
<td>15%</td>
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</tbody>
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University Policies

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. Some examples of offences are: plagiarism and unauthorized co-operation or collaboration. Information on this policy may be found in the Undergraduate Calendar.

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.

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.

“If you are unsure of the expectations regarding academic integrity (how to use and cite references, how much collaboration with lab- or classmates is appropriate), ASK your instructor. Sharing assignment or quiz specifications or posting them online (to sites like Chegg, CourseHero, OneClass, etc.) is considered academic misconduct. You are never permitted to post, share, or upload course materials without explicit permission from your instructor. Academic integrity offences are reported to the office of the Dean of Science. Penalties for such offences can be found on the ODS webpage: https://science.carleton.ca/academic-integrity/.”

Academic Integrity: Minimum penalties for offences starting 6 January 2020

First offence, first-year students (< 4.0 cr): Final grade reduction of one full grade (e.g., A- becomes a B-, if that results in an F, so be it)
First offence (everyone else): F in the course
Second offence: One-year suspension from program
Third offence: Expulsion from the University
Note: these are minimum penalties. More-severe penalties will be applied in cases of egregious offences (e.g., a first-year student accessing CULearn from their phone during an exam will be given an F in the course; bribing a faculty member for a better grade would be grounds for suspension, etc.)

Academic Accommodations for Students with Disabilities. The Paul Menton Centre for Students with Disabilities (PMC) provides services to students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD),
Autism Spectrum Disorders (ASD), chronic medical conditions, and impairments in mobility, hearing, and vision. If you have a disability requiring academic accommodations in this course, please contact PMC at 613-520-6608 or pmc@carleton.ca for a formal evaluation. If you are already registered with the PMC, contact your PMC coordinator to send me your Letter of Accommodation at the beginning of the term, and 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 me to ensure accommodation arrangements are made. Please consult the PMC website for the deadline to request accommodations for the formally-scheduled exam (if applicable) at http://www2.carleton.ca PMC/new-and-current-students/dates-and-deadlines

**Religious Obligation.** Write to me 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 the Equity Services website: http://www2.carleton.ca/equity/

**Pregnancy Obligation.** Write to me 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 the Equity Services website: http://www2.carleton.ca/equity/

**Medical Certificate.** The following is a link to the official medical certificate accepted by Carleton University for the deferral of final examinations or assignments in undergraduate courses. To access the form, please go to http://www.carleton.ca/registrar/form