

Course Outline and resources

Read the syllabus information (including the [course policies page](https://canvas.ualberta.ca/courses/26969/pages/course-policies-must-read) (<https://canvas.ualberta.ca/courses/26969/pages/course-policies-must-read>)). This document details information as required by U of A regulations.

General Information

Lecture A1/EA1: T/R 9:30:00-10:50, T LB-001, Mohammad Salavatipour

Lecture A2/EA2: T/R 11:00-12:20, CCIS L2-190, Bailey Kacsmar

Seminar F1/EF1: Mon 5:00-6:50, CCIS L2-200

Seminar F2/EF2: Tue 3:30-5:20, CCIS 1-140

Seminar F3/EF3: Thr 3:30-5:20, ESB 3-27

Overview and Objectives

Computing science is about using computers to solve problems. The branch of mathematics that is most useful in working with digital computers is discrete mathematics. This is the mathematics of whole numbers and finite sets.

Ultimately, problem solving and discrete mathematics underlie every aspect of computing science, from the design of hardware and developing software to the theory of computation.

In CMPUT 272, students learn the fundamentals of discrete mathematics and then use that knowledge to solve problems and communicate the correctness of their solutions.

Course Materials





(Strongly) Recommended Textbook: Discrete Mathematics with Applications, 4th Edition. Susanna S. Epp. Brooks/Cole (2011).

Lectures will follow the recommended textbook. You are not required to buy the book, but it will be quite helpful for you to have access to the book. In particular the questions for quizzes and tests will come from the exercises in the book!

A discounted electronic copy of the book (for one year) may be purchased from the publisher and bookstore: [Link to purchase \(https://bookstore.ualberta.ca/adoption-search-results?ccid=31436&itemid=220364\)](https://bookstore.ualberta.ca/adoption-search-results?ccid=31436&itemid=220364)

Errata and Review Materials: <http://condor.depaul.edu/sepp/DMwA4e.htm> ~~false (false)~~

Additional References:

- A Short Course in Discrete Mathematics. Edward A. Bender and S. Gill Williamson. Dover (2005). Available on the web at no cost: [here](http://cseweb.ucsd.edu/~gill/BWLectSite/) 
(<http://cseweb.ucsd.edu/~gill/BWLectSite/>.)
- Discrete and Combinatorial Mathematics, 5th Edition. Ralph P. Grimaldi. Pearson (2004).
- Available on the web at no cost: [here](http://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-042j-mathematics-for-computer-science-fall-2010/readings/) 
(<http://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-042j-mathematics-for-computer-science-fall-2010/readings/>)
- Essential Discrete Mathematics for Computer Science: [here](https://www.pdfdrive.com/essential-discrete-mathematics-for-computer-science-e188683804.html) 
(<https://www.pdfdrive.com/essential-discrete-mathematics-for-computer-science-e188683804.html>)
- Noriko Tomuro Lecture Slides from Epp Textbook: [here](https://condor.depaul.edu/ntomuro/courses/400/) 
(<https://condor.depaul.edu/ntomuro/courses/400/>)

Instructors

Section A1/EA1:

Mohammad R. Salavatipour

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E-mail: mrs@ualberta.ca

Section A2/EA2:

Bailey Kacsmar

Office: UComm 7-252

E-mail: kacsmar@ualberta.ca

Teaching Assistants

Help Sessions

Mohammad Salavatipour's office hours:

Tuesdays 11:00-12:00 (Starting Sept 12), or by appointment

Bailey Kacsmar's office hours:

Tuesdays 2:30-3:30 (Starting Sept 12), or by appointment.

TA office hours:

- **Midterm 1 Office Hours:**
 - Session #1:
 - **TBA**
 - Session #2:
 - **TBA**
- **Midterm 2 Office Hours:**
 - Session #1:
 - **TBA**
 - Session #2:
 - **TBA**

Topics to be covered and relevant readings from the text

- Week 1: Chapter 2.1-2.2
- Week 2: Chapter 2.3 - 2.5
- Week 3: Chapter 3.1 - 3.3
- Week 4: Chapter 3.3 - 3.4, 4.1 - 4.6
- Week 5: Chapter 4.6 - 4.7, 8.4, 5.1-5.2
- Week 6: Chapter 5.1 - 5.4
- Week 7: Chapter 6.1-6.2,
- Week 8: Chapter 6.3 - 6.4, 7.1-7.2
- Week 9: Chapter 7.3, 8.1-8.3
- Week 10: Chapter 8.5, 9.1-9.3
- Week 11: Chapter 9.5-9.6

- Week 12: Chapter 9.4 - 9.7
- Week 13: Chapter review

Grading System

8 quizzes in seminars (30 minutes): 22% (at 2.75% each).

Two term tests in class (75 minutes): 38.5% (at 19.25% each).

Final exam (3 hours): 39.5%.

Important dates

Sept 9: Seminars begin.

Sept. 30. No seminar. University closed in honor of the National Day for Truth and Reconciliation.

Oct 16: Test 1 in class (coverage: **materials covered in lectures Weeks 1-5 up to the beginning but not including Chapter 5**)

Nov 10-14: Reading week (no classes)

Nov 20: Test 2 in class (coverage: **materials covered in lectures from Chapters 5-8**)

Dec 10: Final exam (as per [Consolidated Exam Schedule \(https://www.ualberta.ca/registrar/examinations/exam-schedules/fall-2023-winter-2024-consolidated-exam-schedule.html\)](https://www.ualberta.ca/registrar/examinations/exam-schedules/fall-2023-winter-2024-consolidated-exam-schedule.html).)

Quiz dates:

Quizzes are in the seminars in the following weeks:

Q1: Seminars of week of Sept 15

Q2: Seminars of Week of Sept 22

Q3: Seminars of Week of Oct 6

Q4: Seminars of week of Oct 20

Q5: Seminars of week of Oct 27

Q6: Seminars of week of Nov 3

Q7: Seminars of week of Nov 24

Q8: Seminars of week of Dec 1

Note that CMPUT272 has a consolidated Final Exam. See [here \(https://www.ualberta.ca/registrar/examinations/exam-schedules/fall-2023-winter-2024-consolidated-exam-schedule.html\)](https://www.ualberta.ca/registrar/examinations/exam-schedules/fall-2023-winter-2024-consolidated-exam-schedule.html).

Deferred Final exam date: Jan 12 2025 9:30AM

