

CIS*3150 (0101) F22 - Theory of Computation







JS

Course Outline

CIS*3150 Course Outline (0.5 Credits)

School of Computer Science University of Guelph Fall 2022

Instructor: Joe Sawada

Email: jsawada@uoguelph.ca

Office: Reynolds 2226

Office hours: Tues, Thurs 10:30-11:30. Other times via zoom at

tiny.cc/JoeSawadaZoom available by appt.

Website: courselink

Lectures: Tues/Thur 4:00-5:20 in MCKN 117

Prerequisites: CIS*2750, CIS*3490

Labs: MON 4:30-5:20 ROZH 102

TA: TBA

TA office hours: In lab and by email appt.

Course Description: This course explores the theory of computation including automata theory, Turing machines and their variants, formal languages, parsing, the Halting problem, undecidability, and NP-completeness.

Required Text: Introduction to the Theory of Computation, Sipser, 2nd Edition (or 3rd). http://www-math.mit.edu/~sipser/book.html

Grading Scheme:

- 10% Quizzes
- 25% Assignments
- 20% Midterm
- 45% Final

Important Dates:

• Thu Sept 8: First day of class

Mon Sept 26: Assignment 1

Wed Oct 12: Assignment 2

• Tue Oct 11: NO CLASS - Fall break

• Mon Oct 24 : Assignment 3

• Thu Oct 27: MIDTERM

• Mon Nov 14: Assignment 4

Wed Nov 30: Assignment 5 (day before last day of class)

Final exam: TBA

Quizzes: There are 11 quizzes (one due each **Monday** 11:59pm), the top **10** of 11 quizzes will be counted. The quizzes are designed to take less than 30 minutes, although an hour is allowed.

Assignments: Each assignment is worth 5% of your final mark and **must be submitted via the Dropbox**. It is due at 11:59pm on the date it is due. Absolutely NO late assignments will be accepted. See policies below.

E-mail Communication

As per university regulations, all students are required to check their <mail.uoguelph.ca> e-mail account regularly: e-mail is the official route of communication between the University and its students.

When You Cannot Meet a Course Requirement

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons, please advise the course instructor (or designated person, such as a teaching assistant) in writing, with your name, id#, and e-mail contact. See the undergraduate calendar for information on regulations and procedures for Academic Consideration.

Drop Date

Students will have until the last day of classes to drop courses without academic penalty. The regulations and procedures for course registration are available in their respective Academic Calendars.

Copies of out-of-class assignments

Keep paper and/or other reliable back-up copies of all out-of-class assignments: you may be asked to resubmit work at any time.

Accessibility

The University promotes the full participation of students who experience disabilities in their academic programs. To that end, the provision of academic accommodation is a shared responsibility between the University and the student.

When accommodations are needed, the student is required to first register with Student Accessibility Services (SAS). Documentation to substantiate the existence of a disability is required, however, interim accommodations may be possible while that process is underway.

Accommodations are available for both permanent and temporary disabilities. It should be noted that common illnesses such as a cold or the flu do not constitute a disability.

Use of the SAS Exam Centre requires students to book their exams at least 7 days in advance, and not later than the 40th Class Day.

More information: www.uoguelph.ca/sas

Academic Misconduct

The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community – faculty, staff, and students – to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring. University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection.

Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

The Academic Misconduct Policy is detailed in the Undergraduate Calendar.

Recording of Materials

Presentations which are made in relation to course work—including lectures—cannot be recorded or copied without the permission of the presenter, whether the instructor, a classmate or guest lecturer. Material recorded with permission is restricted to use for that course unless further permission is granted.

Resources

The Academic Calendars are the source of information about the University of Guelph's procedures, policies and regulations which apply to undergraduate, graduate and diploma programs.

Disclaimer

Please note that the ongoing COVID-19 pandemic may necessitate a revision of the format of course offerings, changes in classroom protocols, and academic schedules. Any such changes will be announced via CourseLink and/or class email.

This includes on-campus scheduling during the semester, mid-terms and final examination schedules. All University-wide decisions will be posted on the COVID-19 website (https://news.uoguelph.ca/2019-novel-coronavirus-information/) and circulated by email.