UNIVERSITY OF GUELPH
Department of Computing & Information Science
COURSE OUTLINE

Disclaimer

Please note that the ongoing COVID-19 pandemic may necessitate a revision of the format of course offerings and academic schedules. Any such changes will be announced via CourseLink and/or class email. All University-wide decisions will be posted on the COVID-19 website [hyperlink to the website] and circulated by email.

<table>
<tr><td>Course Code:
CIS*3150</td><td colspan="2">Course Title:
Theory of Computation</td><td>Date of Offering:
Fall 2020</td></tr>
<tr><td colspan="2">Instructor:
Dr. Charlie Obimbo</td><td colspan="2">Office: Reynolds 3310
Extension: 52634
Email: cobimbo@uoguelph.ca</td></tr>
<tr><td colspan="2">Teaching Assistant(s): TBA</td><td colspan="2">Email:</td></tr>
<tr><td colspan="2">Calendar 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.

Prerequisite(s): CIS*2750, CIS*3490</td><td colspan="2">Topics:
• Automata Language
• Finite Automata (DFAs and NFAs)
• Context Free Languages & Grammars
• Pushdown Automata
• Predictive Parsers
• Turing Machines
• Complexity Theory</td></tr>
<tr><td colspan="2">Class Information: Lectures
T/TH 8:30 – 9:50, Room Virtual</td><td colspan="2">Class Information: Labs
M 3:30 pm – 4:20 pm, Room Virtual</td></tr>
<tr><td colspan="4">Required Texts:
• Introduction to the Theory of Computation, Michael Sipser, 3rd revised edition.
Please note that you are expected to read the text book, and the material will be tested in Class!</td></tr>
<tr><td colspan="4">Method of Evaluation:</td></tr>
<tr><td>Course Work</td><td>Date</td><td colspan="2">Weight</td></tr>
<tr><td>Assignments (5)
Class Particip-n Exercises
Test 1
Test 2</td><td>Sep18,Oct2,Oct23,Nov6,Nov25

October 8th
November 12th</td><td colspan="2">30%
10%
17%
18%</td></tr>
<tr><td>Final Exam</td><td>TBD</td><td colspan="2">25%</td></tr>
<tr><td>Grading Policies</td><td colspan="3">The student must attempt all course work and get at least 50% in the Course work and at least 50% on the Tests and Exam portion in order to receive a passing grade. In case the Student does not achieve 50% in either the Final Exam, or the Course Work (the combination of Assignments and Tests), then the grade will be calculated as 50% of the Assignment marks, plus the marks of the remaining portions, as described in this Course Outline.
All remarks are to be done no later than 1 week after the return of “scripts”.
Impt Note: Students are responsible for all material presented in class and for announcements made both in class, CourseLink & by Electronic Means.
All Programming assignments are to be E-mailed, tarred and zipped and placed in the dropbox of CIS*3150 (in CourseLink).</td></tr>
<tr><td colspan="4">Platform: CourseLink</td></tr>
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ILLNESS

The University will not require verification of illness (doctor's notes) for Fall 2020 or Winter 2021 semesters.

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

Do not redistribute recorded interactive discussions that involve your classmates. This includes advising times and question and answer sessions with the instructor.

Online activities such as advising times, question and answer sessions, and interactive lectures may be recorded by the instructor or TAs and posted to CourseLink. By taking this course you are agreeing that your participation in these activities can be used in this manner. If you do not wish to have your image or voice recorded as part of these activities then either do not take this course or do not ask verbal questions during these activities.

A reliable internet connection that is sufficient for online learning is necessary for this course. If you do not have a sufficiently fast and reliable internet connection then you may not be able to view or download lectures or other course material. It may also not be possible to attend online advising with teaching assistants or the instructor.

This course is offered in the eastern standard time zone (EST). While taking this course then you may be required to attend online activities such as advising times or labs between 9:00 and 4:30 EST.

Keep copies of assignments which you have submitted. You may be asked to resubmit assignments at a later time.

ACADEMIC INTEGRITY

The University of Guelph is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards, and must abide by the applicable policies (see Section VIII of the Undergraduate Calendar on "Academic Misconduct").

Respondus Monitor and Lockdown will be used for the Tests and Final Exam in this course.

For educational purposes, instructors impose conditions on assignments that may limit students' permission to collaborate with others or to utilize external sources (including, but not limited to, software, data, images, text, etc.). The use of **Chegg and such like websites is not allowed.** Any permitted utilization must be done with proper references. Instructors may use automated tools: such as **TurnItIn** to detect possible cases of plagiarism. Work that shows significant unnatural similarity, or that appears to be copied from unacknowledged sources, will be investigated as potential academic misconduct. "**Aiding and abetting**" is also a punishable offence, and students must be careful not to help others commit offences by giving out their files or allowing others to access their computer accounts. *Consider yourself warned.*

ACCEPTABLE USE POLICY

Please read the complete University of Guelph policy found on
http://www.uoguelph.ca/web/aupg.shtml.

CHANGES IN DATES ON COURSE OUTLINES

See: Undergraduate Calendar: VIII. Undergraduate Degree Regulations and Procedures: Grading Procedures (Resolution 5)

E-MAIL POLICY

Students should include their name and course number in every email, *e.g.* Joe Smith: CIS*3150, since instructors are often involved in teaching more than one course per term. To comply with university privacy policy, all emails should be sent from your ***uoguelph*** account (**not from hotmail.com, gmail.com, or any other non-UoG host**). All students are responsible for reading their *uoguelph* email and therefore should maintain their accounts, *i.e.* disk quotes should be monitored so that email is not rejected due to lack of space.