

# CIS\*2910 (Winter 2020)

## Discrete Mathematics II

<b>Instructor:</b>	<b>Dr. Charlie Obimbo</b>
Office:	Reynolds Room 104    519 824-4120 x 52634
E-mail:	cobimbo@uoguelph.ca
Lectures:	<b>TTh 2:30 - 3:50 p.m.</b>
Room:	THRN, Room 1200
Labs:	1. MACK 230    Tue    8:30 - 10:20 a.m.
	2. MACK 230    Wed    8:30 - 10:20 a.m.
	3. MACK 230    Wed    3:30 - 5:20 p.m.
	4. MACK 230    Wed    7:00 - 8:50 p.m.
	5. MACK 230    Th    11:30 a.m. - 1:20 p.m.
	6. MACK 224    Mon    9:30 - 11:20 a.m.
Final Exam:	Location TBA: <b>Fri. Apr-17, 8:30 a.m. - 10:30 a.m.</b>
Office Hours:	Tues 11:00 a.m. - 1:00 p.m.
<b>Graduate Teaching Assistants:</b>	
GTA's E-mails	

**Text: Discrete Mathematics & It's Applications (7th Ed.)**  
**Kenneth H. Rosen Addison Wesley, 2012.**

## 1 Course Evaluation

Assessment	Marks	
Class Participation	7 %	[In Class Questions]
Labs	10 %	Lab Assessments
Assignments [6]	18 %	
Quizzes	30 %	[Q1 is on Feb 7 (6-8 p.m.); Q2 is on Mar 13 (6-8 p.m.); 15 marks each ]
Final Exam	35 %	[The Final Exam is on April 16, 7 - 9 p.m.]

**Please note these three Dates as they will not be changed for anybody.**

To Pass the course, the student has to get at least 50% in the Course work (Participation, assignments and labs), at least 50% on the Tests and at least 50% on the Final Exam. Failure to do so will end in the student achieving a Maximum grade of 45% for the whole course.

Your final grade is the weighted sum of all assessments shown above unless you fail the final exam, in which case your final grade is calculated by

$$0.4(\text{Labs} + \text{Assignments}) + \text{Participation} + \text{Midterm} + \text{Final Exam}$$

## Courselink

Check for announcements frequently. Also, read your general e-mail.

**Impt Note:** Students are responsible for all material presented in class and for announcements made both in class & by Electronic Means.

**All Programming assignments are to be E-mailed, tarred and zipped to the ta account (gradta2910@gmail.com).**

## Lectures:

### Outline

(Topics covered will include, but not limited to.)

- |  |               |
|--|---------------|
| 1. Review of Sequences & Sums                      | Chap. 2       |
| 2. Mathematical Induction                          | Chap. 1, 5    |
| 3. Number Systems                                  | (Obi's Notes) |
| 4. Growth of Functions, & Complexity of Algorithms | Chap. 3       |
| 5. Induction & Recursion                           | Chap. 5 & 8   |
| 6. Counting strategies & their summations          | Chap. 6       |
| 7. Introduction to Discrete Probability            | Chap. 7       |
| 8. Graphs, Graph representation                    | Chap. 10      |
| 9. Traversal and simple graph algorithms           | Chap. 10      |
| 10. Trees  | Chap. 11      |
| 11. Finite State Machine Models                    | Chap. 13      |
| 12. Miscellaneous and Review                       | —             |

**Having the text will be an absolute necessity.**

## Academic Misconduct

The University of Guelph takes a very serious view of Academic Misconduct. Included in this category are such activities as cheating on examinations, plagiarism, misrepresentation, and submitting the same material in two different courses without written permission. Students are expected to be familiar with the section on Academic Misconduct in the Undergraduate Calendar, and should be aware that expulsion from the University is a possible penalty. If an instructor suspects that academic misconduct has occurred, that instructor has the right to examine students orally on the content or any other facet of submitted work. Moreover, it is expected that unless a student is explicitly given a collaborative project, all submitted work will have been done independently.

## When You Cannot Meet a Course Requirement

When you find yourself unable to meet an in-course requirement due to illness or compassionate reasons, please advise the course instructor (or other designated person) in writing, with name, address and e-mail contact. Where possible, this should be done in advance of the missed work or event, but otherwise, just as soon as possible after the due date, and certainly no longer than one week later. Note: if appropriate documentation of your inability to meet that in-course requirement is necessary, the course instructor, or delegate, will request it of you. Such documentation will rarely be required for course components representing less than 10% of the course grade.