

1. Course Information

Course Information

<u>Course Title:</u> Discrete Structures for Engineering

Course Code: MATH 2151A 001 FW21

Course Format: In person

Location: MW: SSC-2050

Tu: AHB-1R40

Meeting times: MW 12:30 PM to 1:20 PM

Tu 11:30 PM to 12:20 PM

List of Requisites

<u>Prerequisites:</u> Computer Science 1026A/B or Engineering Science 1036A/B

Corequisites: Computer Science 1027A/B or 1037A/B

Antirequisites: Mathematics 2155F, the former Mathematics 2155A/B, the former Software

Engineering 2251A/B

This course is offered only to software engineering students enrolled in the Faculty of Engineering. Unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

2. Instructor Information

<u>Instructor:</u> Avi Steiner

Instructor email: asteine9@uwo.ca

Contact Policies

- Students must use their Western (@uwo.ca) email addresses when contacting their instructor.
- Students must include "MATH 2151" in the subject line.

Online Office Hours

By appointment. Zoom only.

Teaching Assistant(s)

TBA

3. Course Syllabus, Schedule, Delivery Mode

Course Description

Here is a brief outline of the topics covered in Math 2151:

- Logic and proofs
- Sets, relations and functions
- Integers, induction, and recursion
- Counting

Key Sessional Dates

<u>Classes begin:</u> September 8 <u>Reading Week:</u> November 1-7 Classes end: December 8

Contingency plan for an in-person class pivoting to 100% online learning

In the event of a COVID-19 resurgence during the course that necessitates the course delivery moving away from face-to-face interaction, all remaining course content will be delivered entirely online, either synchronously (i.e., at the times indicated in the timetable) or asynchronously (e.g., posted on OWL for students to view at their convenience). The grading scheme will **not** change. Any remaining assessments will also be conducted online as determined by the course instructor.

In the event of a health lockdown

In the event of a health lockdown, tests and examinations in this course will be conducted using a remote proctoring service. By taking this course, you are consenting to the use of this software and acknowledge that you will be required to provide **personal information** (including some biometric data) and the session will be **recorded**. Completion of this course will require you to have a reliable internet connection and a device that meets the technical requirements for this service. More information about this remote proctoring service, including technical requirements, is available on Western's Remote Proctoring website at:

https://remoteproctoring.uwo.ca.

4. Course Materials

Students are responsible for checking the course OWL (http://owl.uwo.ca) on a regular basis for news and updates. This is the primary method by which information will be disseminated to all students in the class.

All course material will be posted to OWL: http://owl.uwo.ca.

If students need assistance with the course OWL site, they can seek support on the OWL Help page. Alternatively, they can contact the Western Technology Services Helpdesk. They can be contacted by phone at 519-661-3800 or ext. 83800.

Textbook Information

Textbook: Discrete Math textbook available on zybooks via OWL

<u>How to access:</u> The textbook may be accessed through the tools menu on OWL and completing the following:

- 1. Click on your zyBooks link in OWL (**Do not go to the zyBooks website and create a new account**)
- 2. Subscribe.

A subscription is **USD 58**. Subscriptions will last until January 14, 2021. **Every student must own an individual subscription of the textbook** as there will be assignments on zybooks that will count toward your final grade.

iClicker

This course uses iClicker. You will need to sign up for it using the instructions here: http://presswestern.uwo.ca and click on **Students and Audience**. Nothing you will be doing with it will affect your grade; in particular, it won't use it to take attendance.

5. Methods of Evaluation

Evaluation

The overall course grade will be calculated as listed below:

Participation activities on zyBooks	2.5%
Challenge activities on zyBooks	2.5%
Written Homework	15%
Midterm 1 (Oct 8 @ 7pm)	20%
Midterm 2 (Nov 12 @ 7pm)	20%
Final Exam	40%

Exams

There will be two in-person midterm exams and an in-person final exam.

Electronic devices (including cell phones and calculators) are NOT allowed on exams and may be confiscated.

Excused Absences

If a student has permission to miss a midterm, **no makeup exam** will be given. Instead, this component will be reweighted to the other midterm and the final exam. **To be eligible to pass this course, you must take at least one midterm exam and the final exam.**

Honour Pledge

Students will be required to submit a signed honour pledge with any online exams.

Homework

There will be three types of homework for this course:

Participation activities on zyBooks – A participation activity on zyBook is an activity used in the initial learning of a topic. Anyone can get all PA points just by participating (hence the name).

Challenge activities on zyBooks – A challenge activity is the zyBook version of a homework problem. A CA allows students to apply and practice what they've learned. Students must eventually get a CA right on their own to get points.

Written homework – There will be 4 essay type homework assignments in this course to test proof writing.

Homework will be marked by the teaching assistant. **Late homework** will not be accepted without permission from the course instructor. Homework deadlines will be posted well in advance on the course website.

6. Student Absences

Academic Consideration for Student Absences

Students who experience an extenuating circumstance (illness, injury or other extenuating circumstance) sufficiently significant to temporarily render them unable to meet academic requirements may submit a request for academic consideration through the following routes:

- (i) Submitting a Self-Reported Absence (SRA) form provided that the conditions for submission are met. To be eligible for a Self-Reported Absence:
 - an absence must be no more than 48 hours
 - the assessments must be worth no more than 30% of the student's final grade
 - no more than two SRAs may be submitted during the Fall/Winter term
- (ii) For medical absences, submitting a Student Medical Certificate (SMC) signed by a licensed medical or mental health practitioner to the Academic Counselling office of their Faculty of Registration.
- (iii) Submitting appropriate documentation for non-medical absences to the Academic Counselling office in their Faculty of Registration.

Note that in all cases, students are required to contact their instructors within 24 hours of the end of the period covered, unless otherwise instructed in the course outline.

Students should also note that individual instructors are not permitted to receive documentation directly from a student, whether in support of an application for consideration on medical grounds, or for other reasons. All documentation required for absences that are not covered by the Self-Reported Absence Policy must be submitted to the Academic Counselling office of a student's Home Faculty.

For the policy on Academic Consideration for Student Absences – Undergraduate Students in First Entry Programs, see:

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_illness.pdf

and for the Student Medical Certificate (SMC), see:

http://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf.

Religious Accommodation

When a course requirement conflicts with a religious holiday that requires an absence from the University or prohibits certain activities, students should request accommodation for their absence in writing at least two weeks prior to the holiday to the course instructor and/or the Academic Counselling office of their Faculty of Registration. Please consult University's list of recognized religious holidays (updated annually) at

https://multiculturalcalendar.com/ecal/index.php?s=c-univwo.

Absences from Final Examinations

If you miss the Final Exam, please contact the Academic Counselling office of your Faculty of Registration as soon as you are able to do so. They will assess your eligibility to write the Special Examination (the name given by the University to a makeup Final Exam).

You may also be eligible to write the Special Exam if you are in a "Multiple Exam Situation" (e.g., more than 2 exams in 23-hour period, more than 3 exams in a 47-hour period).

If a student fails to write a scheduled Special Examination, the date of the next Special Examination (if granted) normally will be the scheduled date for the final exam the next time this course is offered. The maximum course load for that term will be reduced by the credit of the course(s) for which the final examination has been deferred. See the Academic Calendar for details (under Special Examinations).

7. Accommodation and Accessibility

Accommodation Policies

Students with disabilities work with Accessible Education (formerly SSD), which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The policy on Academic Accommodation for Students with Disabilities can be found at:

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/Academic Accommodation_disabilities.pdf

8. Academic Policies

The website for Registrarial Services is http://www.registrar.uwo.ca.

In accordance with policy,

https://www.uwo.ca/univsec/pdf/policies_procedures/section1/mapp113.pdf,

the centrally administered e-mail account provided to students will be considered the individual's official university e-mail address. It is the responsibility of the account holder to ensure that e-mail received from the University at his/her official university address is attended to in a timely manner.

All of the remote learning sessions for this course will be recorded. The data captured during these recordings may include your image, voice recordings, chat logs and personal identifiers (name displayed on the screen). The recordings will be used for educational purposes related to this course, including evaluations. The recordings may be disclosed to other individuals participating in the course for their private or group study purposes. Please contact the instructor if you have any concerns related to session recordings.

Participants in this course are not permitted to record the sessions, except where recording is an approved accommodation, or the participant has the prior written permission of the instructor.

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site: http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf.

9. Support Services

Please visit the Science & Basic Medical Sciences Academic Counselling webpage for information on add/drop courses, academic considerations for absences, appeals, exam conflicts, and many other academic related matters: https://www.uwo.ca/sci/counselling/

Please contact the course instructor if you require lecture or printed material in an alternate format or if any other arrangements can make this course more accessible to you. You may also wish to contact Student Accessibility Services (SAS) at (519) 661-2147 if you have any questions regarding accommodations.

Western University is committed to a thriving campus as we deliver our courses in the mixed model of both virtual and face-to-face formats. We encourage you to check out the Digital Student Experience website to manage your academics and well-being: https://www.uwo.ca/se/digital/.

Learning-skills counsellors at the Student Development Centre (http://www.sdc.uwo.ca) are ready to help you improve your learning skills. They offer presentations on strategies for improving time management, multiple-choice exam preparation/writing, textbook reading, and more. Individual support is offered throughout the Fall/Winter terms in the drop-in Learning Help Centre, and year-round through individual counselling.

Students who are in emotional/mental distress should refer to Mental Health@Western (http://www.health.uwo.ca/mental health) for a complete list of options about how to obtain help.

Additional student-run support services are offered by the USC, http://westernusc.ca/services.