Course Syllabus

Jump to Today 🔊 Edit

Got a Question?

- Please start by reading the entire *Syllabus* (this page) and checking the course *Modules* (use the link on the left): you may find that your question is already answered!
- If you have not found an answer, and your question is of general interest (the answer is likely to be useful to other students), and the information contained in your question respects the academic integrity of the course (it does **not** reveal any idea or part of a solution to a Quercus module, assignment, or term test), please start a new topic on the course discussion forum (<u>Piazza</u>): this way, we can answer once for everyone.

Sign up for Piazza by visiting <u>https://piazza.com/utoronto.ca/fall2021/csc263h1</u> (<u>https://piazza.com/utoronto.ca/fall2021/csc263h1</u>).

 However, if your question is personal (the answer is useful only to you), or your question cannot be asked without revealing an idea or part of a solution to a prep quiz, assignment, or test, please ask during office hours or send email from your U of T email address, to csc263-2021-09@cs.toronto.edu (mailto:csc263-2021-09@cs.toronto.edu). Please include your

full name and UTORid in your signature — this will allow us to answer faster.

Please do NOT use Quercus messaging! Email really is the fastest way to reach course staff.

Prerequisites

Each year, many students ask if they can take CSC263H1 at the same time as STA247H1/257H1/..., especially in the Fall term. Unfortunately, this is not possible — if it made sense, we would have long ago changed the course prerequisites to make it easier for everyone! The issue is simple: CSC263H1 relies on students being comfortable computing expected values and using techniques such as indicator random variables right from the first week of the course.

The other prerequisite (CSC236H1/...) is similarly essential: we rely on your familiarity with the algorithm correctness proof format taught in CSC236H1, and the analysis techniques for the running time of divideand-conquer algorithms. These skills are required right from the start in CSC263H1, so you really do need to have completed the prerequisites first.

If this is your situation, and you have no prior experience with the material from STA247H1/257H1/... or CSC236H1/..., then I am sorry to inform you that your best course of action is to wait until you are ready to take CSC263H1. Remember that course prerequisites are not arbitrary; rather, they are a distillation of our years of experience with thousands of students. Far from being obstacles in a student's way, they are meant to provide signposts to support student success. More concretely, they represent the knowledge and skills that students require to get the best possible learning experience from a course. Don't shortchange your

own learning for the sake of convenience or "speed"!

Overview

In the table below, each "Week" consists of the 7-day period beginning on a Thursday (the first day of classes for the fall term). This means that the "term weeks" for the course do NOT line up with the regular work weeks (Monday–Friday), and explains why Fall Reading Week (Nov 8–12) splits term week 9 in two pieces: Thursday–Friday before Reading Week, and Monday–Wednesday after Reading Week.

Also, "Chapters" refer to the chapters and sections in the course Textbook (see immediately below the table), A1, A2, A3 are the three <u>Assignments</u>, and T1, T2 are the two <u>Term Tests</u>.

Week	Dates	Topics	Chapters	Due	Notes
1	Sep 9 <i>-</i> Sep 15	Abstract Data Types; Runtime Analysis	2–4		
2	Sep 16 <i>-</i> Sep 22	Priority Queues; Heaps	6		deadline to enrol (Sep 22)
3	Sep 23 – Sep 29	Dictionaries; Binary Search Trees	12.1–12.3		
4	Sep 30 – Oct 6	AVL Trees	14	A1 (Oct 5)	
5	Oct 7 – Oct 13	Augmentation (Ordered Sets)	11		Thanksgiving (Oct 11)
6	Oct 14 – Oct 20	Hashing; Randomization; Quicksort	5, 7	T1 (Oct 15)	
7	Oct 21 – Oct 27	Amortization; Dynamic Tables	17		
8	Oct 28 – Nov 3	Graphs; Breadth-First Search	22.1–22.2	A2 (Nov 2)	
9	Nov 4 – Nov 17	Depth-First Search	22.3–22.4		Reading Week (Nov 8–12) deadline to drop (Nov 8)
10	Nov 18– Nov 24	Minimum Spanning Trees	23	T2 (Nov 19)	
11	Nov 25 – Dec 1	Disjoint Sets	21		
12	Dec 2 – Dec 8	Lower Bounds	8.1, 9.1	A3 (Dec 7)	Make-Up Day (Dec 9)

Textbook

The course textbook, <u>Cormen, Lieserson, Rivest & Stein: Introduction to Algorithms, 3rd edition</u> (<u>https://mitpress.mit.edu/books/introduction-algorithms-third-edition</u>) is available online from the <u>University</u> <u>of Toronto library</u> (<u>https://librarysearch.library.utoronto.ca/permalink/01UTORONTO_INST/14bjeso</u> /alma991106991137506196).

Learning Outcomes

By the end of CSC263H1, you will be familiar with a variety of standard, complex data structures and abstract data types (graphs, dictionaries, balanced search trees, hash tables, heaps, disjoint sets), and with standard, more advanced complexity measures (average-case, amortized). More specifically, you will be able to:

- recognize algorithms that employ each data structure,
- write algorithms that employ each data structure,
- recognize when each complexity measure is most appropriate,
- analyze the efficiency of algorithms using each complexity measure,
- choose and/or modify data structures appropriately to solve various problems.

Creating a Positive Learning Environment

We are committed to creating a respectful learning environment in computer science courses for all students and expect that you will adhere to the University of Toronto's <u>Code of Student Conduct</u>

(<u>http://www.viceprovoststudents.utoronto.ca/publicationsandpolicies/codeofstudentconduct.htm</u>). Please be mindful of how your behaviour influences the atmosphere in our learning community, not just in classes, but also in computer labs, in online forums, and anywhere that you interact with other students and members of the department.

Sections	Lectures	Tutorials	
		Fri 15:00–16:00 in room BA 1220 for	
	Mon 15:00–16:00 in room MP 102	students with last names B–L	
	Wed 15:00–16:00 in room RW 117	Fri 15:00–16:00 in room BA 1210 for	
LEC	Zoom meeting ID: 842 4457 2297	students with last names M–Z, A	
0101/2001	Zoom passcode: 263L01	Zoom meeting ID: 885 9080 3145	
	<u>utoronto.zoom.us/j/84244572297</u>	Zoom passcode: 263T01	
	(<u>https://utoronto.zoom.us/j/84244572297</u>)	utoronto.zoom.us/j/88590803145	
		(<u>https://utoronto.zoom.us/j/88590803145</u>)	
	Mon 16:00–17:00 in room MP 102	Fri 16:00–17:00 in room BA 1190 for	
	Wed 16:00–17:00 in room MP 102	students with last names B–L	
LEC	Zoom meeting ID: 857 8002 1390	Fri 16:00–17:00 in room BA 1170 <i>for</i>	
0201/2101	Zoom passcode: 263L02	students with last names M–Z, A	
	<u>utoronto.zoom.us/j/85780021390</u>	Zoom meeting ID: 856 2834 6638	

Lectures and Tutorials

(https://utoronto.zoom.us/j/85780021390)

Zoom passcode: 263T02 utoronto.zoom.us/j/85628346638 (https://utoronto.zoom.us/j/85628346638)

Further details

- There WILL be a tutorial on Friday 10 September, where TAs will introduce themselves and briefly review background material from prerequisite courses.
- Materials for each lecture and tutorial (slides, recordings, worksheets, etc.) will be added to each week's <u>Module</u>.
- In lectures, the instructor will present new material (concepts, definitions, examples, etc.), and will
 sometimes run short interactive activities to gauge everyone's understanding. Lectures will be recorded
 (more details on this below).
- In tutorials, you will practice solving problems related to the course material, with the help of a TA to answer your questions. TAs will sometimes take a few minutes to review concepts or discuss material, if many students are struggling with something specific. The main benefit of tutorials is to give you a chance to get feedback and help on your understanding. This is a critical part of the learning experience for this course; please make an effort to participate in every tutorial! Because of their highly interactive nature, tutorials will NOT be recorded.
- This course is offered in person, meaning that all lectures, tutorials, term tests, and the final examination require your presence on the U of T campus. **However**, online access is provided for *all* lectures and tutorials (not just during the first two weeks), for students who are unable (or unwilling) to join the class in person. You can find the Zoom links, meeting IDs, and passcodes in the table above.
- There is NO plan to offer online versions of the <u>Term Tests or Exam</u>, since online testing is notoriously difficult and problematic; please make arrangements to attend these assessments on campus. Announcements WILL be made if public health guidelines require any change to this plan.
- Please read the <u>technical requirements</u> section below for further information on joining lectures or tutorials online, as well as privacy information about lecture recordings.

Contact Information

Instructor	Office Hours	Location	Email	
François Pitt	Mon 12:00–14:00	utoronto.zoom.us/j /84042714066 (https://utoronto.zoom.us /j/84042714066) Zoom meeting ID: 840 4271 4066 Zoom passcode: 263263 Online only	<u>csc263-2021-09@cs.toronto.edu</u> (<u>mailto:csc263-2021-09@cs.toronto.edu</u>)	
	Wed 12:00–14:00	Sep 9–23: online only, at utoronto.zoom.us/j		

/84042714066 (https://utoronto.zoom.us /j/84042714066) Zoom meeting ID: 840 4271 4066 Zoom passcode: 263263 After Sep 23: in-person only, in room BA3201

Marking Scheme — TENTATIVE

With public health guidelines evolving rapidly, there is a chance that class activities and assessments may need to move online. In this case, the relative weights of various items will need to be adjusted — *in particular, the final exam will NOT be worth 43% if it has to be held online*! The marking scheme described below is what is planned in case all class activities DO take place in person, but **it is not final until at least the first week of classes** (maybe even a little later in the term, if the deadline to submit official marking schemes is extended due to the pandemic). Any changes will be described in an Announcement.

- 4% for 11 Quercus Modules (0.5% each, total capped at 4%)
- 27% for 3 Assignments (10% for your best mark, 9% for your next best, 8% for your last)
- 26% for 2 Term Tests (13% each)
- 43% for 1 Final Examination

Quercus Modules

Starting in Week 2, you will complete a weekly Quercus Module worth 0.5%, due by 17:00 every Thursday. These modules must be completed **individually** (without partners), and will have components marked for correctness. You may submit answers as many times as you wish (up to the deadline), but **only your last on-time submission will be marked**. Each Module will consist of a combination of the following elements.

- **Demonstrate**: Quiz questions that give the opportunity to demonstrate and exercise the main concepts from the previous week's lectures and tutorial.
- **Discover**: Readings or links to a video or simulation where new material is introduced. CSC263H1 is not completely "flipped", unlike courses like CSC108H1 and CSC209H1. However, some of the easier concepts will be taught through Discover components. You must complete these components before the following lectures. This allows the lectures to go further by building on the content of the Discover modules, instead of having to "waste" lecture time going over the easiest concepts. Each Discover component will usually be paired with a Describe component.
- **Describe**: Short quiz questions about new material from an associated Discover component. If you find that you cannot answer these questions, you should go back and redo the Discover activity more carefully, before trying the Describe quiz again. You may also find it helpful to consult the relevant

chapters in the course textbook, for additional explanations and examples.

• **Review**: Short quizzes that mostly test prerequisite material (concepts that you are expected to know from previous courses). If you are not confident about your answers to a review quiz, please take the time to review the corresponding material from your prerequisite courses and then retake the quiz (before its deadline, of course).

Please aim to complete the Quercus Modules well before their submission deadline (17:00 on Thursdays): **late submissions will NOT be accepted under any circumstance**. Each module will be available at least 6 full days before it is due, so you have plenty of time to attempt it before Thursday and to work around any technical difficulties you may encounter. If you face an unexpected personal emergency that makes you incapable of doing any coursework *for one full week or more*, then you should request <u>Special</u> <u>Consideration</u> (see below).

Assignments

Assignments are to be completed in groups of 2–3 students. Groups with only 1 student will be allowed but are discouraged, as they do not provide the same learning opportunities as working on the problems together with some of your peers. Assignments must be fully typed, and the resulting PDF document submitted directly on MarkUs. *More details about MarkUs will be added after September 25 — the date on which student accounts will be created. Links and resources about LaTeX will also be added, for those interested in using it to write up their submissions — but you will NOT be required to use LaTeX.*

All assignments are due by 17:00 on their due dates (see the <u>Overview</u>), and late submissions will be penalized by -0.5% for every 15 minutes of lateness, rounded **down** (yes, this means the first 14 minutes and 59 seconds of lateness incur NO penalty), up to a maximum lateness of 24 hours, 14 minutes, and 59 seconds. After that time, no late submission will be accepted, unless <u>Special Consideration</u> has been requested (see below for details). Assignments will be weighted on a sliding scale: your best assignment mark will be worth 10%, your next best mark will be worth 9%, and your worst assignment mark will be worth 8% of your final course mark.

Term Tests and Exam

Term Tests will take place on campus, during regularly scheduled class time, on 15 October (Term Test 1) and 19 November (Term Test 2). For each test, you will be allowed to bring *one* 8.5"×11" sheet of paper, *handwritten on* **one** side only. No other aid will be allowed (in particular, no calculators). Further details will be provided a few weeks before each test: the exact location for the test, what material will be covered, etc.

For the Final Examination, you will be allowed to bring one 8.5"×11" sheet of paper, handwritten on **both** sides. No other aid will be allowed (in particular, no calculators). **You must earn a mark of at least 40% on the Final Examination in order to pass the course** — in other words, if your mark on the exam is less than 40%, your final mark in the course will be reduced below 50. Details of the final exam (date and time and location) will be provided directly on <u>the Exams page of the Faculty of Arts & Science</u> (<u>https://www.artsci.utoronto.ca/current/faculty-registrar/exams</u>).</u>

Remarking

If you have questions or concerns about the marking of one of your assignments or term tests, please submit a remarking request directly on MarkUs, **within one week after the work was returned**. Be specific when you write up your request: either clearly demonstrate that the marking scheme was not followed correctly, or ask questions about specific elements in the marking scheme. Note that marks are awarded based on merit, not on need — that is the only fair way to award marks — so statements like "I worked really hard" or "I really need those marks" are not good reasons.

It is perfectly acceptable to submit a remarking request if you are unsure whether or not your work was marked correctly but you have not necessarily found an actual error in the marking. In this case, simply provide a clear description of what you think the marker may have misinterpreted and what you have questions about. The more specific your request is, the more detailed our response will be.

Keep in mind that when we process a remarking request, we really **re-mark** your work — though not necessarily your entire submission, maybe only one question, or one part of a question. This gives us a chance to correct any error or misunderstanding that may have been committed by the original marker, whether this was in your favour or not. In other words, there is a small possibility that you lose marks as a result of a remarking request, if the original marker applied the marking scheme incorrectly. However, this is very rare and should not prevent you from submitting a remarking request if you believe that other errors were made.

Special Consideration

If you are unable to complete homework or if you miss a test due to major illness or other circumstances outside your control, please follow these steps:

- Download the Request for Special Consideration Form (to be added) and fill it out.
- Send the completed form by email to <u>csc263-2021-09@cs.toronto.edu</u> (mailto:csc263-2021-09@cs.toronto.edu), from your U of T email address. Please include the words "Special Consideration" in your Subject line.
- Submit your request **immediately**: it is much easier to make arrangements before a due date than after. In particular, *you should NOT wait until you have assembled all your documentation to contact us*: you can submit supporting documentation later, but it's important for us to know about your situation as soon as possible.

Special consideration will be evaluated on a case-by-case basis and is not given automatically. In particular, we may be unable to grant you exactly the special consideration you seek. (For example, it may not be possible to grant multi-day extensions on assignments, because we may want to release sample solutions in time for all students to study before a term test, or the final exam.) In such cases, we would need to work out an appropriate alternative accommodation, so please do reach out early to ensure we have the time to discuss your situation.

If you face a situation that is particularly disruptive and likely to have an impact on more than one course,

please contact your <u>College Registrar</u> <u>(https://future.utoronto.ca/current-students/registrars/)</u> — they are best equipped to provide you with appropriate advice and support. They can also help you document you request for special consideration, without the need for you to divulge lots of personal information to every one of your instructors.

For illness or injury, including cold or flu-like symptoms and self-isolation, please *self-declare your absence through the Absence Declaration tool on ACORN* (the tool can be found in the Profile and Settings menu). You should record each day of your absence as soon as it begins, up until the day before you return to classes or other academic activities.

Accessibility

The University of Toronto is committed to accessibility. If you require accommodations for an ongoing disability or an acute issue such as an injury, you should register with <u>Accessibility Services</u> (<u>https://studentlife.utoronto.ca/service/accessibility-services-registration-and-documentation-requirements/</u>) (AS). The process of accommodation is private: AS will not share details of your needs or condition with any instructor, and your instructors will not reveal that you are registered with AS.

Students who require accommodations for term tests (or the final exam) must register with <u>Accommodated</u> <u>Testing Services</u> (<u>https://lsm.utoronto.ca/ats/</u>). We will only be providing test accommodations sent to us through that official channel.

Academic Integrity

Everything that you submit for marks (Quercus quizzes, assignments, tests and exam) must not contain anyone else's work or ideas without proper attribution. In particular, the write-up of your homework must be done in isolation from other groups and without copying from notes or other sources. This ensures that your solution is truly your own, and that your mark reflects your own understanding of the course material. To be safe, do not let others look at your solutions, even in draft form and even after the due date.

Please consult the <u>Academic Integrity at U of T</u> <u>(https://www.academicintegrity.utoronto.ca/)</u> website: it contains good information and concrete strategies to help support your learning in ways that follow the principles of academic integrity, in addition to references to formal policies and procedures.

Technical requirements

To participate in this course on Zoom...

- You require reliable access to a **full computer** (*not just a smartphone*) on which you can browse web pages, read lecture slides, and type and submit assignments. (*Actually, this first requirement applies to everyone, even if you attend lectures and tutorials in person.*)
- This computer must have a **microphone**, optionally a webcam, as well as a **reliable**, **high-speed internet connection** for attending the lectures and office hours online.
- You need to be able to use Quercus and Zoom.

- You need to be available **during the scheduled class times**. This is particularly important to benefit from the discussions in breakout rooms, which cannot be recorded.
- You need access to a quiet space with as few distractions as possible. We realize this may be difficult for some, but please do your best: you know how easy it is to get distracted even during an on-campus lecture; imagine how much easier it is if you are surrounded by distractions. At the very least, make sure to turn off all notifications and non-essential software: give yourself a chance to be fully engaged with the material for the best learning experience.

Zoom accounts

Every student at the university has access to a free UofT Zoom account. Simply log on to <u>utoronto.zoom.us</u> (<u>https://utoronto.zoom.us/</u>) with your UTORid and password to activate your free account. You must do this **before** you try to join the class!

Video Recording and Sharing

Lectures will be recorded on video and will be available to students in the course for viewing remotely and after each session. Tutorials will NOT be recorded because they will mostly consist of group work in breakout rooms. Your participation in the lecture may be included in these recordings if you ask a question by unmuting yourself; however, the contents of the chat will NOT be included in the recordings.

Course videos and materials belong to your instructor, the University, and/or other source depending on the specific facts of each situation, and are protected by copyright. In this course, you are permitted to download session videos and materials for your own academic use, but you should not copy, share, or use them for any other purpose without the explicit permission of the instructor. For questions about recording and use of videos in which you may appear please contact course staff at the course email address (csc263-2021-09@cs.toronto.edu (mailto:csc263-2021-09@cs.toronto.edu)).

You may have some questions about how to use Zoom appropriately. Here are some insights into what is okay and not okay in CSC263H1 (borrowed from Prof. Mario Badr, who wrote these for CSC108H1 in Fall 2020).

What's OK?

- It's OK to participate in class meetings however and wherever is comfortable to you. Yes, that includes participating from bed in your pajamas, if that works for you that's one advantage of joining on Zoom instead of in-person!
- It's OK to feel some nervousness and/or discomfort about participating in an online class.
- It's OK to keep your audio and video off some or all of the time. However, remember that the tutorials for this course are heavily discussion-based: to get the most out of them, you have to be willing to engage in the discussion! We think that using audio in small group discussions such as breakout groups or office hours can be helpful and enhance your learning, but you are welcome to participate by text chat only if you prefer.
- It's OK to screenshot or take photos of course content when shared in class meetings or office hours, *for your own personal academic use only*. (Remember that full recordings of each lecture will be available,

so you should not need to do this.)

- It's OK to set your display name in Zoom to just your first name or your preferred name.
- It's OK to use (classroom appropriate!) virtual backgrounds if you want to.

What's not OK?

- It's not OK to disrupt the class and other students' learning by showing inappropriate or distracting things in your video or profile picture, by turning on audio when others are trying to speak and listen, or by posting disruptive things in the chat.
- It's **not** OK to screenshot or record parts of class meetings or office hours for *anything* other than personal academic use.
- It's not OK to share images or video from class meetings or office hours on social media.
- It's **not** OK to capture or record any personal information about your classmates or course staff without their consent.

Date	Details	Due
	Demonstrate: Week 1 Concepts and Reading the Syllabus (https://q.utoronto.ca/courses/233750 /assignments/638459)	due by 5pm
Thu Sep 16, 2021	Describe: Priority Queue ADT (https://q.utoronto.ca/courses/233750 /assignments/638458)	due by 5pm
	Review: Binary Trees (https://q.utoronto.ca/courses/233750 /assignments/638460)	due by 5pm
	Demonstrate: Heap Operations (https://q.utoronto.ca/courses/233750 /assignments/638463)	due by 5pm
Thu Sep 23, 2021	Describe: Dictionaries (https://q.utoronto.ca/courses/233750 /assignments/638462)	due by 5pm
	Review: Binary Search Trees (https://q.utoronto.ca/courses/233750 /assignments/638461)	due by 5pm

Course Summary:

Date	Details	Due
	Demonstrate: Binary Search <u>Trees (https://q.utoronto.ca/courses</u> /233750/assignments/638466)	due by 5pm
Thu Sep 30, 2021	Describe: AVL Trees (https://q.utoronto.ca/courses/233750 /assignments/638464)	due by 5pm
	Review: Problem Set 1 Handout (https://q.utoronto.ca/courses/233750 /assignments/638465)	due by 5pm
Tue Oct 5, 2021	A1 Due (https://q.utoronto.ca /calendar?event_id=418806& include_contexts=course_233750)	5pm to 5:15pm
TL 0.17.0001	Demonstrate: AVL Trees (https://q.utoronto.ca/courses/233750 /assignments/638467)	due by 5pm
Thu Oct 7, 2021	Describe: Hashing (https://q.utoronto.ca/courses/233750 /assignments/638468)	due by 5pm
	Demonstrate: Augmentation (https://q.utoronto.ca/courses/233750 /assignments/638470)	due by 5pm
Thu Oct 14, 2021	Describe: Quicksort (https://q.utoronto.ca/courses/233750 /assignments/638469)	due by 5pm
	T1 (LEC0101) (https://q.utoronto.ca /calendar?event_id=418807& include_contexts=course_233750)	3pm to 4pm
Fri Oct 15, 2021	T1 (LEC0201) (https://q.utoronto.ca /calendar?event_id=418808& include_contexts=course_233750)	4pm to 5pm

Date	Details	Due
	Demonstrate: Hashing (https://q.utoronto.ca/courses/233750 /assignments/647730)	due by 5pm
Thu Oct 21, 2021	Demonstrate: Randomized Quicksort (https://q.utoronto.ca /courses/233750/assignments/638472)	due by 5pm
	Describe: Dynamic Arrays (https://q.utoronto.ca/courses/233750 /assignments/638471)	due by 5pm
	Demonstrate: Amortized Analysis (https://q.utoronto.ca/courses /233750/assignments/638473)	due by 5pm
Thu Oct 28, 2021	Describe: Graphs (https://q.utoronto.ca/courses/233750 /assignments/638474)	due by 5pm
Tue Nov 2, 2021	A2 Due (https://q.utoronto.ca /calendar?event_id=418821& include_contexts=course_233750)	5pm to 5:15pm
Thu Nov 4, 2021	Demonstrate: Graph Representations and BFS (https://q.utoronto.ca/courses/233750 /assignments/638475)	due by 5pm
	Demonstrate: Depth First Search (https://q.utoronto.ca/courses /233750/assignments/638476)	due by 5pm
Thu Nov 18, 2021	Describe: Spanning Trees (https://q.utoronto.ca/courses/233750 /assignments/638477)	due by 5pm
Fri Nov 19, 2021	T2 (LEC0101) (https://q.utoronto.ca /calendar?event_id=418822& include_contexts=course_233750)	3pm to 4pm
	T2 (LEC0201) (https://q.utoronto.ca /calendar?event_id=418823&	4pm to 5pm

Date	Details	Due
	include_contexts=course_233750)	
	Demonstrate: MST Algorithms (https://q.utoronto.ca/courses/233750 /assignments/647729)	due by 5pm
Thu Nov 25, 2021	Demonstrate: Strongly Connected Components (https://q.utoronto.ca/courses/233750 /assignments/638478)	due by 5pm
	Describe: Disjoint Set ADT (https://q.utoronto.ca/courses/233750 /assignments/638479)	due by 5pm
Thu Doc 2, 2021	Demonstrate: Disjoint Sets (https://q.utoronto.ca/courses/233750 /assignments/667999)	due by 5pm
1110 Dec 2, 2021	Describe: Comparison Trees (https://q.utoronto.ca/courses/233750 /assignments/658360)	due by 5pm
Tue Dec 7, 2021	A3 Due (https://q.utoronto.ca /calendar?event_id=418824& include_contexts=course_233750)	5pm to 5:15pm
Thu Dec 9, 2021	Course Review (https://q.utoronto.ca/courses/233750 /assignments/638480)	due by 5pm