

Recent Announcements

CSC263H1S 20251 (All Sections): Data Structures and Analysis

[Jump to Today.](#)

 Edit

Welcome to CSC263H! Please start by reading the entire syllabus (this page) and then checking the course Modules (use the link on the left). The material posted on Quercus is required reading. You are responsible for all announcements made in lecture and on Quercus.

For general course-related questions, please use Piazza or visit us during office hours.

To contact the course instructors regarding personal issues related to csc263, please send email from your U of T email address to csc263-2025-01@cs.toronto.edu
(<mailto:csc263-2025-01@cs.toronto.edu>)

Do not use Quercus messaging for anything related to CSC263.

Instructors, Contact Hours, and Communication

Section	LEC0101	LEC0201	LEC0301	LEC5101
Time	Tues & Thurs 9-10am	Tues & Thurs 1-2pm	Tues & Thurs 2-3pm	Thurs 6-8 pm
Instructor	Michelle Craig	Michelle Craig	Marsha Chechik	Marsha Chechik
Room	MP 103	BA 1130	MP 103	BA 1130

Instructors will hold **office hours** in BA 4290 on Tuesdays 10:15-11:00 and Thursdays 3:15-4:00

Marking Scheme Summary

Weekly Quercus Modules (11) + Tutorial Quizzes (7)	15%	Each worth 1%. We drop the lowest 3.
Practice Problems	0%	
Term Tests (4)	40%	Test 1 Jan 31 (10%), Test 2 Feb 14 (10%). Test 3 March 7 (10%), Test 4 March 28 (10%)
Final Exam	45%	Students must earn at least 40% on the final exam to pass the course.

Quercus modules

Starting in Week 2, you will complete a weekly Quercus Module worth 1%, due by 9am every Tuesday. These modules must be completed **individually** (without partners), and are 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 (9am on Tuesdays): **late submissions will NOT be accepted under any circumstance**. Each module will be available for almost a week before it is due, so you have plenty of time to attempt it before Tuesday and to work around any technical difficulties you may encounter.

Tutorial quizzes

In the tutorial timeslot for seven of the weeks that do not have tests, we will have regular tutorials. We will post practice problems early in the week and you should plan to work on these alone or with study partners before your tutorial. Then, you should bring your partial solutions and questions to the tutorial to work further with some guidance. After each of these seven tutorials, we will open an online Quercus quiz based on a subset of the tutorial problems. You will have until 9am on the following Thursday to submit your answers.

Term tests and tutorial enrolment

Term tests will be 50 minutes written in person in your registered tutorial time slot on Fridays. The location of the tests will be different than the regular rooms and will be announced in the preceding week.

You MUST enrol in a tutorial section during which you are available to write all term tests. You must do this directly on ACORN, separately from your lecture section.

Tutorial times will be used to write every term test (and also to hold regular tutorials). Because tutorial room capacity is limited, each tutorial time will have only enough seats and test copies for the students formally enrolled at that time. This means that **you must be enrolled in a tutorial section that you can actually attend**, because there will be no room for you in any other. If you have another course scheduled which conflicts with your CSC263 tutorials, you must either drop CSC263 or drop the other course.

Contact us

Please do **NOT** use Quercus messaging! Please do **NOT** send email directly to your instructor or TA!

1. **Before you ask your question**, please *take a few minutes to see if it might already be answered* on this page (or pages linked from it, including Piazza). You will get an answer faster (no need to wait), and it will make the course better for everyone by leaving us more time to answer other questions.

2. In particular, all course announcements will be posted here, on Quercus. *You are responsible for reading all announcements made by the course team (instructors□/□TAs□/□staff), and for being familiar with the entire content of this Syllabus.*
3. If your question is NOT already answered on the course website or discussion board, then either:
 - Start a new topic on Piazza (the course discussion board), for all questions of *general interest* (whose answer could be useful to other students).or:
 - Send email **from your U of T email address, to the course email address** (csc263-2025-01@cs.toronto.edu (<mailto:csc263-2025-01@cs.toronto.edu>)), for all questions that are *personal* (whose answer is useful only to you). **Please include your UTORid (username) in the body of your message.**
4. In particular, please ask ALL questions about course content and problems directly on Piazza. This also applies to questions about course administration□/□logistics, *except* for very personal questions that are relevant only to your unique situation, where you should use email.
5. **Do NOT post any message that reveals the questions or answers on one of our Term Tests, until at least the Tuesday following the test.**
6. We aim to respond to all email and Piazza postings within 48 business hours (not counting weekends and holidays). However, it may take longer, especially near due dates or before the start of classes. If you do not hear back after four days, please do not hesitate to send a follow-up email, or come in person during office hours.

Academic Integrity

All work you submit must be your own. It is an academic offence to copy the work of someone else□—□even if the other person is not a student□—□*unless you explicitly and clearly attribute the work to its original source.* This includes words, sentences, entire documents, and even ideas. Whether you copy or let someone else copy, it is an offence. Academic offences are taken very seriously and can have correspondingly serious consequences.

At the same time, we want you to benefit from working with other students. For this course, you are allowed to discuss how to solve the practice problems with anyone you wish. The purpose of the practice problems is to ensure that **you** understand how to solve them. Even if you did not generate a solution yourself, you can still receive useful feedback on your work by discussing it with friends.

What about ChatGPT?

In this course, you may use generative artificial intelligence (AI) tools (like ChatGPT and GitHub Copilot) as learning aids and to help complete practice problems. *You will NOT be permitted to use generative AI on the term tests or final exam.* While some generative AI tools are currently available for free in Canada, please be warned that these tools have not been vetted by the University of Toronto and might not meet University guidelines or requirements for privacy, intellectual property,

security, accessibility, and records retention. Generative AI may produce content which is incorrect or misleading, or inconsistent with the expectations of this course. They may even provide citations to sources that don't exist—☐—☐and submitting work with false citations is an academic offense. These tools may be subject to service interruptions, software modifications, and pricing changes during the semester.

Generative AI is NOT required to complete any aspect of this course, and we caution you to not rely on these tools to complete your practice problems or the online quizzes. Instead, we recommend treating generative AI as a supplementary tool only for exploration. Ultimately, you (and not any AI tool) are responsible for your own learning in this course, and for all the work you submit for credit. It is your responsibility to critically evaluate the content generated, and to regularly assess your own learning independent of generative AI tools. Over-reliance on generative AI may give you a false sense of how much you've actually learned, which can lead to poor performance on the term tests or final exam, in later courses, or in future work or studies after graduation.

Policy for missed term tests

You are expected to write every test. In addition to providing us with a component of your final course mark, each test will provide *you* with valuable feedback on your understanding of a significant portion of the course material. If you are truly unable to write a test, we can make up for the missing marks easily enough (as described in the next paragraphs), but it is more difficult (and requires more work on your part) to make up for the lost learning opportunity. This places you at a disadvantage for the final exam. The policy described in the next paragraphs does NOT mean that you can simply *choose* to “skip a test”. Rather, it is meant for *emergencies*: situations where you are truly **unable** to write the test with everyone else (not just when it is inconvenient). You have to judge whether your situation is only an inconvenience (something that prevents you from performing at the top of your abilities but whose actual impact on your performance is limited), or a major disadvantage (something that makes your performance *significantly* worse than normal). We understand that sometimes it can be difficult to make a clear distinction between these two types of situations. For your own sake, we ask that you be realistic about your expectations and that you only request Special Consideration when it is truly necessary.

If you miss a test for unexpected reasons outside your control, please follow the instructions in the Special Consideration section. If you miss one test for an approved reasons, we will calculate a mark for the test you missed, based on your performance on the other tests *and on the final exam*, taking into account the class averages on every test and exam. We do this by calculating a combined z-score for your exam and other tests, where the exam has the *same weight* as each test (this provides a statistically accurate measure of the “distance” between your performance and the class average), then *assigning* a mark for each missed test that corresponds to the *same* z-score. This approach ensures that you are not unfairly penalized if the test you missed was easier, but also that you do not gain an unfair advantage if you missed a harder test: in every case, your performance

relative to the rest of the class remains unchanged, and the mark we calculate for you is relative to the class average for the test(s) you missed. In this case, we *recommend* that you [make an appointment with our department's Learning Strategist \(https://q.utoronto.ca/courses/221753/pages/learning-strategy-support\)](https://q.utoronto.ca/courses/221753/pages/learning-strategy-support) to discuss your situation, but *this is not required* to receive special consideration for only one or two (non-consecutive) missed tests.

If you miss two consecutive tests, we **require** that you make (and keep) an in-person appointment with our department's Learning Strategist, to put in place a concrete plan for the rest of the term, *before* we will approve any exception. This ensures that you are realistic about your ability to succeed in the course and that you have thought about how you will manage the risk: after all, missing two tests would put you in a situation where you would be taking the final exam with NO feedback on your performance on half of the material in the course. To ensure you do not engage in “magical thinking” (that everything will work out fine, but without a concrete plan), *we will require confirmation from our Learning Strategist* that you have met with them and that your approach to the rest of the term is realistic. Once we receive this, we can easily put in place appropriate accommodations for all your missed work, using the z-score method described above.

At the limit, **we cannot approve special consideration for every test**. In other words, special consideration can be provided for missed tests **only if** you have taken *at least* one test during the term. If you have faced circumstances disruptive enough to make you unable to write *every single test*, then NO special consideration can be provided, for ANY of your missed tests. In this scenario, it is unrealistic to expect that you have been able to learn the course material. If you have been unable to demonstrate your learning for the **entire** term, *please speak with your College Registrar to file a petition to drop the course, and make plans to take it again later*. We understand it can be terribly frustrating to want to engage with the course and be prevented from it by circumstances outside your control. But wishful thinking is not the same as actual learning... it's much better for you to engage with the support services in place within the university, and to work on a *realistic* alternative.

Special Consideration

The reason that we allow students to count the best 15 of the 18 Quercus units (weekly modules and tutorial quizzes) is to accommodate those who enroll late, experience illness, or face other unexpected circumstances. The intention is for you to complete all of these items and learn from them, but we appreciate that sometimes you may be prevented from doing this on time. We cannot give any extensions on the Quercus work. If you are so ill (or absent) for an extended time such that you are unable to even do online work for multiple weeks, please send email to the course address (csc263-2025-01@cs.toronto.edu (<mailto:csc263-2025-01@cs.toronto.edu>)) to discuss your situation. Special consideration will be evaluated on a case-by-case basis and is not given automatically ☐—☐

we may be unable to fully grant you the special consideration you seek, so please ensure we have time to discuss your situation.

If you miss a term test, you must fill out a Missed Term Test Form . [Link to become active after first test.] Simply complete and submit the form online as soon as you can, **together with supporting documentation**. Accepted forms of documentation include Absence Declaration (via ACORN), or the University's Verification of Student Illness or Injury (VOI) form, or letters from your College Registrar or Accessibility Services. Remember that *Absence Declaration can be used at most ONCE PER TERM*, and for a maximum of seven consecutive days. If you have already used your Absence Declaration for the term, **you must submit other acceptable documentation**. For more information on each type of documentation, including when and how to use it, please read all the details carefully on the [Student Absences \(https://www.artsci.utoronto.ca/absence\)](https://www.artsci.utoronto.ca/absence) page from the Faculty of Arts & Science.

IMPORTANT: If you know that you will NOT be able to write a term test, just submit the request form as soon as you are able (and have obtained appropriate documentation). It is NOT necessary to send email for "simple" requests due to illness□/□injury or personal□/□family emergencies□—□just the form is sufficient. However, if your situation is particularly unusual or complex, please contact us (by email, using [csc263-2025-01@cs.toronto.edu \(mailto:csc263-2025-01@cs.toronto.edu\)](mailto:csc263-2025-01@cs.toronto.edu)) to discuss the details. In that case, **please reach out as soon as you can** (even before you have obtained documentation): it is always easier to resolve situations earlier rather than later.

If you face a situation that is particularly disruptive (especially if it is likely to affect more than one course), please also contact your [College Registrar \(https://future.utoronto.ca/current-students/registrars/\)](https://future.utoronto.ca/current-students/registrars/) □—□they are best equipped to provide you with general advice and support that goes beyond a single course. They can also help you document your situation and contact each of your course instructors on your behalf, to simplify the process of requesting accommodations.

Mistakes in Test Marking

If you believe there was an error in the marking of your test□—□or if you just have questions about how your work was marked□—□you may request that it be reviewed. Please complete and submit a Marking Mistake Reporting Form [Link to become active after first test is returned.] (no separate form or email message is required). You must give a specific reason for the request, referring to possible errors or omissions by the marker, or asking specific questions about the feedback (or lack of feedback) you received.

These requests must be received within **two weeks** of when the item was returned.

If you believe that you have found a mistake in the automatic marking of a Quercus Quiz question,

you can bring it to our attention in an office hour or on Piazza. If we discover that the automated quiz marking is incorrect, we will fix it for everyone in the class.

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 [Accessibility Services \(https://studentlife.utoronto.ca/service/accessibility-services-registration-and-documentation-requirements/\)](https://studentlife.utoronto.ca/service/accessibility-services-registration-and-documentation-requirements/) (AS). The process of accommodation is both confidential and private. AS provides the information necessary to implement an accommodation and no more, e.g., what is listed in a Letter of Accommodation. Your instructors and other university staff will not reveal that you are registered with AS.

Students who require accommodations for term tests (or the final exam) must register with [Accommodated Testing Services \(https://ism.utoronto.ca/ats/\)](https://ism.utoronto.ca/ats/) (ATS). We will only be providing test accommodations sent to us through that official channel. This helps to guarantee that accommodations are provided in a fair and consistent manner for everyone.

Learning Outcomes

By the end of this course, students 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 complexity measures (worst-case, average-case, amortized). More specifically, students 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

Course Summary: