

Course Syllabus

[Jump to Today](#)

Syllabus

Instructors: Harry Sha and Nathan Wiebe

Course email: csc373-2025-01@cs.toronto.edu (<mailto:csc373-2025-01@cs.toronto.edu>)

Text: [CLRS] [Introduction to Algorithms: Cormen, Thomas H., Leiserson, Charles E., Rivest, Ronald L., Stein, Clifford: 8601419521876: Books - Amazon.ca](#) (https://www.amazon.ca/gp/product/0262033844/ref=ppx_yo_dt_b_asin_title_o00_s00?ie=UTF8&psc=1) There is also a free online version from U of T library.

Optional:

- [DPV] Dasgupta, Papadimitriou, Vazirani: Algorithms.
- [KT] Kleinberg, Tardos: Algorithm Design.

Resource: Check out Nisarg Shah's CSC373 course notes/recordings at: <https://www.cs.toronto.edu/~nisarg/teaching/373f21/> (<https://www.cs.toronto.edu/~nisarg/teaching/373f21/>), except for the ethics module, which we will not cover in this semester.

Here's a practice final: [CSC373Final \(1\).pdf](#) (<https://q.utoronto.ca/courses/380134/files/35462905?wrap=1>) [↓](#) (https://q.utoronto.ca/courses/380134/files/35462905/download?download_frd=1)

Recordings and slides from Wiebe's lectures from previous years can be found at: [Wiebe Slides and Recordings 2023](#) https://utoronto-my.sharepoint.com/:f:/g/personal/nathan_wiebe_utoronto_ca/EkFX8lmswyNGIPOKkTg__bkB7rRRVT1yn5T-sgA72kZAXw?e=xCIJCj

Piazza: [Piazza Link](#) https://piazza.com/demo_login?nid=m5gxz127fk2uz&auth=b4b57fb

Piazza Policy: Out of respect for the teaching staff and other students, please avoid posting negative comments or constructive criticism about the course in forums. For any such feedback please speak to the professors or TAs individually and we will do our best to address your concerns. In general please **be respectful** and also note even if a professor provides feedback on Piazza do not assume it is correct. We always endeavor to be correct in our postings, but owing to the nature of online interactions it is much easier to say something wrong online and have it disseminated more broadly.

No marks will be provided to students who get the wrong answers based on a bad hint that any of the teaching staff provides.

General Information

Sha	Wiebe
Lectures: LEC0201 M 1-2 MC 102, W 1-3 BA 1180 Zoom: https://utoronto.zoom.us/j/88443234760  (https://utoronto.zoom.us/j/88443234760) Slides and Videos: Here (https://q.utoronto.ca/courses/380134/pages/lecture-slides-+-recordings-sha) Office hours: BA2272 Fridays 2-3 (starting week 2)	Lectures: LEC0101 M 11-12 MC 254, W 11 - 13 BA 1180 Lectures: LEC0301 M 15-16 BA 1130, W 15 - 17 MC 102 Zoom: https://utoronto.zoom.us/j/88979545884 Meeting ID: 889 7954 5884 https://utoronto.zoom.us/j/89934307231 Slides and Video Link (UoT credentials needed): Link to recordings  https://utoronto-my.sharepoint.com/:f:/g/personal/nathan_wiebe_utoronto_ca/EqRiNTXQb2hDhyijjnP1vxUBovu0oH3CL7UvSiOUwEVUlw Emergency link (expires Feb 9): CSC373  (https://utoronto-my.sharepoint.com/:f:/g/personal/nathan_wiebe_utoronto_ca/ErWuakPz_a1BohNIqBNh-a1B0mVdbCeV05L7j8lgr6NE5g?e=NzcQ5Y) Office hours: TBD

Tutorial Materials and practice exams can be found at: [Tutorial PDFs / Practice Exams Here](https://utoronto-my.sharepoint.com/:f:/g/personal/nathan_wiebe_utoronto_ca/ErWuakPz_a1BohNIqBNh-a1B44PjHJ_1rgBnXFLaRBYWQQ?e=mdY1vE) (https://utoronto-my.sharepoint.com/:f:/g/personal/nathan_wiebe_utoronto_ca/ErWuakPz_a1BohNIqBNh-a1B44PjHJ_1rgBnXFLaRBYWQQ?e=mdY1vE)

Tutorials will be conducted on Fridays starting **THIRD WEEK** of class! The purpose of tutorials is to give you the ability to interact with TAs to get help with the assignments, ask questions about course materials and work with friends on a special problem handed out each class, which may or may not be tested on the midterm examinations! Details for the tutorial sessions are given below. If you have a conflict attending the tutorials, just register any tutorial section that works on your ACORN calendar, and you are welcome to attend the tutorials that you are not registered in, given it is not too packed.

TA Office Hours

TBD

Marking scheme

Assignments: 40 % (Best 3 / 4 will be considered)

Midterm 25%: Feb 26 in Class.

Final: 35 %: Please refer to ACORN, in person (You do not need to pass the final to pass the course)

Marks / assignments will be submitted via Crowdmark. All assignments are preferred in latex (clear handwritten form is okay). Students may work in groups of up to 3 and make 1 submission as a group, but everyone in the group is expected to explain solutions in their own words if asked by an instructor or TA how he/she comes up with the solution. To avoid plagiarism, you need to write down your collaborators and cite your references.

IMPORTANT: 20 % Rule (Borrowed from Allan Borodin)

For all questions (except for multi-choice and bonus questions) you can respond "I do not know how to approach this question" and will receive 20% credit. For sensible strategies that have small issues partial credit will be awarded. No credit will be given for solutions that are either nonsensical or do not demonstrate understanding of the material in the course, or any answer generated by ChatGPT, GPT-4, or similar tools.

READINGS

Schedule

Week Number	Content	Readings
1	Intro & Divide and Conquer	CLRS Ch 4, DPV Ch 2, KT Ch 5
2	Greedy Algorithms	CLRS Ch 16, DPV Ch 5, KT Ch 4
3	Dynamic Programming	CLRS Ch 15, DPV Ch 6, KT Ch 6
4	Dynamic Programming Ends; Network Flow Starts	CLRS Ch 26, DPV Ch 7(7.1-7.3), KT Ch 7
5	Network Flow Applications	Same as above
6	Linear Programming	CLRS Ch 29, DPV Ch 7
7	Complexity	CLRS Ch 34, DPV Ch 8, KT Ch 8
8	Complexity	Same as above

9	Approximation Algorithms & Local Search	CLRS Ch 35, DPV Ch 9, KT Ch 11
10	Approximation Algorithms & Local Search	Same as above
11	Randomized Algorithms	CLRS Ch 5, DPV Ch 1, KT Ch 13
12	Review	

Course Summary:

Date	Details	Due
------	---------	-----