

Overview  
Course Page

This sheet summarizes information related to CSC373H1F *Algorithm Design, Analysis, and Complexity*) during Fall 2021 at St. George. All times listed below are in the **Eastern time zone**.

**Please consult the course webpage for full and up-to-date details regarding the course.** It will be frequently updated with announcements, schedule of lectures, and assignments. *You are responsible for reading all the announcements on the course website; please check at least once a week.*

<https://www.cs.toronto.edu/~nisarg/teaching/373f21/>

Instructor  
Contact

**Instructor** Nisarg Shah

**Webpage** [cs.toronto.edu/~nisarg/](https://www.cs.toronto.edu/~nisarg/)

**Email** [nisarg@cs.toronto.edu](mailto:nisarg@cs.toronto.edu)

**Office** SF 2301C (Please do not drop by unless you have scheduled an in-person meeting)

Discussion  
Board

Piazza will be the preferred forum for asking questions about class material or other topics that are likely to be of general interest to the class. While it may be quicker than scheduling an office hour with an instructor, please do not expect ultra-quick responses.

<https://piazza.com/utoronto.ca/fall2021/csc373>

Course  
Delivery

**During the first two weeks:** All lectures, tutorials, and office hours will be conducted online via Zoom. The lectures will be recorded (your participation may also be recorded), and the recording will be made available via the course web page.

**After the first two weeks:** The tutorials will be in-person, while the office hours will be online via Zoom. For now, the lectures will continue to be online via Zoom in order to make it easy to record them. Technology permitting, they may switch to being in-person.

**Assignment submissions** will be online via MarkUs, and **tests** may be administered in-person or online.

Please consult the course web page for up-to-date details regarding the course delivery. Please note that the delivery format of any component can change during the semester.

All Zoom links will have the same password (emailed to all registered students in advance and available from the instructor upon request), and require the students to *log into Zoom via their \*.utoronto.ca or \*.toronto.edu email*. Students will be expected to follow common Zoom etiquette.

Tutorials

Tutorials will be on Mondays, 4-5pm, for both sections. Each section will be broken into three tutorials based on students' birth month: **A = Jan-Apr, B = May-Aug, C = Sep-Dec**.

A problem set will be released prior to each tutorial. Students are encouraged to attempt the problems before coming to the tutorials. During the tutorials, the TAs will explain the problems and go over key steps of the solutions.

Midterm Tests

Midterm tests will be conducted on Mondays, 4-6pm. All students are expected to be available on Mondays, 4-5pm. **Students who have a conflicting regular commitment on Mondays during 5-6pm must reach out to the instructor by September 30.** Students who reach out in time will be offered to write the midterm test at an alternative time, which will be 10am-noon on the day of the midterm; in case of a conflict with this alternative time, other arrangements will be offered.

Students who miss a test but did not inform the instructor of a conflicting commitments by September 30 may be offered alternative arrangements, only in case of emergencies, and on a case-by-case basis, solely at the discretion of the instructor.

## Assignments

A total of **four assignments** will be posted throughout the course, of which only the **best three assignment grades** will count towards a student's final grade.

MarkUs will be used for assignment submissions. Each assignment can be completed in groups of **up to three** students. Students can form their own groups via MarkUs. Only one group member should create a group and invite others to the group, and only one member should submit the assignment.

Only PDF submissions will be graded. You are encouraged to use LaTeX. Scanned PDF of hand-written solutions will be acceptable, but it is your responsibility to ensure that the handwriting is legible! MarkUs may have a size limit, so you may need to use an online tool to compress your PDF before uploading.

<https://markus.teach.cs.toronto.edu/csc373-2021-09>

## Late Days

- Each student will receive a total of four (4) late days on MarkUs; **no more than two (2) late days** can be used towards a single assignment.
- If a group wants to use  $X$  late days towards an assignment, **every** member must have at least  $X$  late days available, and  $X$  late days will be deducted from every group member upon submission.
- You **do not** earn extra late days for illness, University activities, or other legitimate reasons; these reasons is precisely what the five late days are for. You are responsible for managing your late days.
- If, for some legitimate reason, you absolutely need more late days, you will need to personally request them from the instructor with proper documentation.

## Embedded EthiCS

The course will include an Embedded EthiCS module, conducted in each section during a 2-hour lecture slot. There will be a graded survey and assignment both pre and post module. The pre and post surveys will be worth 0.5% each, and the pre and post assignments will be worth 2% each. Live participation in the module is encouraged, but will not be graded. During the module, the students will work in groups on exercises related to identifying and resolving ethical issues related to the design, implementation, and deployment of algorithms.

## Grading Scheme

- The breakdown is as follows: assignments - 30%, term tests - 40%, Embedded EthiCS surveys and assignments - 5%, final exam/assessment - 25%.
- As mentioned above, only your *best three assignment grades* will count towards your final course grade, and each will be worth 10%.
- Each of the two term tests will be worth 20%, and the final exam/assessment will be worth 25%.
- If you earn less than 40% on the final exam/assessment, your overall grade may be reduced below 50.

## Due Dates

|                     |        |
|---------------------|--------|
| <b>Assignment 1</b> | Oct 5  |
| <b>Assignment 2</b> | Oct 19 |
| <b>Assignment 3</b> | Nov 16 |
| <b>Assignment 4</b> | Dec 7  |
| <b>Midterm 1</b>    | Oct 25 |
| <b>Midterm 2</b>    | Nov 22 |

## References

- The primary reference for this course will be the lecture slides, which will be posted before/slightly after each lecture. In addition, you may refer to the following books.
- *Required*: [CLRS] Cormen, Leiserson, Rivest, Stein: *Introduction to Algorithms*.
- *Supplementary*: [DPV] Dasgupta, Papadimitriou, Vazirani: *Algorithms*.
- *Supplementary*: [KT] Kleinberg; Tardos: *Algorithm Design*.

**Petitions**

- If you are unable to complete homework or if you miss a test due to major illness or other circumstances completely outside your control, please **contact your instructor immediately**.
- Special consideration will be evaluated on a case-by-case basis and will *not* be given automatically. In other words, you risk getting a grade of zero for missed work unless you contact your instructor *promptly*.
- In the case of illness, students will need to fill out an absence declaration form on ACORN and notify the instructor for special consideration.
- If you have any concern or question regarding your situation, please contact your College Registrar—they are best equipped to help you with anything you may be going through.

**Remark Requests**

- Assignment remark requests will be handled through MarkUs. Remark requests for midterm tests will be handled in office hours. For each work, the deadline for remark requests will be announced (either on MarkUs, in class, or on course webpage). It is your responsibility to submit remark request by the deadline.
- Be specific when you write up your request: either clearly demonstrate that the grading scheme was not followed correctly, or ask questions about specific elements in the grading scheme. Note that grades are awarded based on *merit*, not on need—that is the only fair way to award grades—so statements like “I worked really hard” or “I really need those grades” are not good reasons.

**Collaboration**

**Everything that you submit for grades (assignments, tests and exam) must not contain anyone else’s work or ideas *without proper attribution*.** In particular, for assignments, you are free to discuss with other groups. However, you should not take notes or pictures from this discussion. You must write your own solutions in isolation from other groups, without copying from notes or other sources. This ensures that your solution is truly your own. If you derived a critical insight relevant to the exact problem you’re solving from discussion with a classmate or from an online source, you *must* cite the source of your insight. *To be safe, do not let others look at your solutions, even in draft form and even after the due date.*