Lectures Website Orerview

This sheet summarizes information for CSC 373 H1F (*Algorithm Design, Analysis, and Complexity*) during Fall 2015 on the St. George campus. **Please consult the course website for full details.**

https://piazza.com/utoronto.ca/fall2015/csc373h1/home

You are responsible for reading all announcements on the course website; please check at least weekly.

Section	Lectures (Room)	Tutorials (Rooms)
L0101	MF 10 (WI 1017), W 10 (SF 1105)	R 2 (to be announced on course website)
L5101	W 6-9 (WI 1016)	R 6 (to be announced on course website)

Contect

Section	Instructor	Email	Office	Office Hours *
L0101	Narges Norouzi	nnorouzi@comm.utoronto.ca	BA 4158	F 11–12
L5101	François Pitt	fpitt@cs.utoronto.ca	BA 4264	M 2:30-3:30
			*outside thes	e hours, please make an appointment

TA Office Hours: *T* 4–6 *in BA* 5287 (beginning Sep 22). Extra office hours will be held before each term test and the final exam—details will be posted on the course website.



Wee	ek Dates	Due	Worth	Lecture Topics [Text Chapters]	Notes
1	Sep 14–Sep 18			Greedy Algorithms [16]	
2	Sep 21 – Sep 25	Tutorial 1	1%	Greedy Algorithms [23–25]	add date
					(Sep 27)
3	Sep 28–Oct 02	Tutorial 2	1%	Dynamic Programming [15]	
4	Oct 05–Oct 09	Tutorial 3	1%	Dynamic Programming [25]	
5	Oct 13–Oct 16	Term Test 1	13%	Network Flow [26]	Thanksgiving
					(Oct 12)
6	Oct 19–Oct 23	Tutorial 4	1%	Network Flow [26]	
				Linear Programming [29]	
7	Oct 26–Oct 30	Tutorial 5	1%	Linear Programming [29]	Assignment 1
		Assign. 1	10%	P/NP [34]	(Oct 27)
8	Nov 02 – Nov 06	Tutorial 6	1%	NP-completeness [34]	drop date
					(Nov 08)
9	Nov 11 – Nov 17	Term Test 2	13%	NP-completeness [34]	Fall break
					(Nov 09–10)
10	Nov 18–Nov 24	Tutorial 7	1%	Self-Reducibility [34]	
11	Nov 25–Dec 01	Tutorial 8	1%	Approximations [35]	
12	Dec 02 – Dec 08	Tutorial 9	1%	Approximations [35]	Assignment 2
		Assign. 2	10%		(Dec 08)
	Dec 11 – Dec 22	Final Exam	45%		



- A "pre-tutorial" exercise must be handed in during *the first 10 minutes* of each tutorial—details on the course website.
- *Each assignment should be completed in groups of up to three students* (to help you learn better) and is due **by 9:59pm on Tuesday**—details on the course website.
- Late homework submissions are penalized by 1.5% for every *hour* of lateness (rounded up, to a maximum of 36 hours), except for documented unusual circumstances—see the policy on special consideration ("petitions") below.
- The exact date, time, and room for the term tests will be posted on the course website.
- For the term tests, you will be allowed one 8.5" × 11" aid sheet, handwritten on one side.
- For the final exam, you will be allowed one 8.5" × 11" aid sheet, **hand**written on **both** sides.
- If you earn less than 40% on the final exam, your final course grade will be reduced below 50.



- Cormen, Lieserson, Rivest & Stein: *Introduction to Algorithms* 3rd ed., © 2009 MIT Press, ISBN: 978–0–262–03384–8.
- See the course website for additional references, lecture outlines and a free online edition of the textbook (provided by the U of T Libraries).



Petitions

By the end of this course, students will be familiar with standard algorithm design techniques (greedy strategies, dynamic programming, network flow and linear programming, approximations), and understand the importance of computational complexity. More specifically, students will be able to:

- recognize algorithms that employ each technique,
- write algorithms that employ each technique,
- prove the correctness of algorithms that employ each technique,
- analyze the efficiency of algorithms that employ each technique,
- demonstrate membership in *P* and *NP*,
- show *NP*-completeness.

If you are unable to complete homework or if you miss a test due to major illness or other circumstances completely outside of your control, please **contact your instructor immediately**. Special consideration will be considered on an individual basis and will *not* be given automatically. In other words, you risk getting a mark of zero for missed work unless you contact your instructor *promptly*.

In the case of illness, medical documentation must be supplied on the official University of Toronto *Verification of Illness or Injury Form* (see the course website for a link to this document). If you have any concerns or questions regarding your situation, please contact your instructor or your College Registrar—they are well-equipped to help you with anything you may be going through.

All remarking requests must be received within **two weeks** of the date when the work was *returned*. It is your responsibility to check course announcements regularly (for work returned electronically) and to pick up your work in lecture, tutorial, or during office hours (for work returned on paper).

It is to your advantage to 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, unfortunately.

If you are unsure whether or not your work was marked correctly but you have not necessarily found an actual error in the marking, please speak with your instructor.

Everything that you submit for marks (assignments, tests and exam) must not contain anyone else's work or ideas without proper attribution. In particular, the writeup 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 grade 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 read the Guidelines for Avoiding Plagiarism on the course website.



Collaboration

Please use email for personal matters only; post all other questions/comments on the course forum. *Please use a descriptive subject line* for all your electronic correspondence—for email, *always include the course number*. To help prevent your messages being incorrectly tagged as spam, please email only from your CDF or UTORmail account (see www.utorid.utoronto.ca). We will generally answer queries within two business days (not counting weekends), although we may take longer during particularly busy times (e.g., around assignment due dates). For your own sake, please do not rely on getting same-day answers (which we cannot guarantee, unfortunately).