Course Description (based on Faculty of Arts & Science 2013-2014 Calendar):

Standard algorithm design techniques: greedy strategies, dynamic programming, linear programming, network flows, approximation algorithms. Brief introduction to NP-completeness: polynomial time reductions, examples of various NP-complete problems, self-reducibility. Students will be expected to show good design principles and adequate skills at reasoning about the correctness and complexity of algorithms.
Prerequisite: CSC263H1/CSC265H1/CSC378H1; CGPA 3.0/enrolment in a CSC subject POSt.
Exclusion: CSC375H1, CSC364H1.
Distribution Requirement Status: This is a Science course
Breadth Requirement: The Physical and Mathematical Universes (5)

Textbook:

S. Dasgupta, C. Papadimitriou, and U. Vazirani. "Algorithms". McGraw-Hill. 2006.
(ISBN: 978-0073523408).

References:

J. Kleinberg, and E. Tardos. "Algorithm Design", Addison-Wesley, 2005. (ISBN: 978-0321295354)

T. H. Cormen, C. E. Leiserson, R. L. Rivest, C. Stein. "Introduction to Algorithms", 3nd edition, 2009. (ISBN: 978-02622033848)

Website:

Website: http://www.cs.toronto.edu/~milad/csc373

Forum: https://piazza.com/utoronto.ca/summer2013/csc373/home

You are responsible for reading all announcements on the course website and forum.

Contact:

Lectures: Tuesdays 6pm-8pm, Thursdays 6pm-7pm BA1180

Tutorials: Thursdays 7pm-8pm (see the course website for locations)

Office hours: TBA

Instructor's email: milad AT cs DOT Toronto DOT edu

Email Policy:

Please post any question about the course material on Piazza. Use email just for personal matters. Please send emails from your UTOR or CDF account and use a descriptive subject line and include the

course number and your full name. We usually answer questions in 2 business days, but it may take longer.

Grading Scheme:

WORK	WORTH	DUE DATE
Assignment 1	10%	June 6
Assignment 2	10%	July 2
Assignment 3	10%	August 1
Midterm	25%	July 9
Final	45%	TBA

All assignments should be submitted electronically, using MarkUs, by 23:59 on their due date. There are 2 grace days in this course. For assignment 2, any submission after July 3, 23:59 will not be graded.
For the midterm and final exams you are allowed to have one aid sheet (letter size), **handwritten** on both sides.
To pass this course you should earn at least 30% of the final exam.
You will receive 20% for any problem that you leave entirely blank or state "I don't know".

Outline:

Greedy Algorithms

Dynamic Programming

Network Flow

Linear Programming

NP-Completeness

Remarking:

The remarking requests should be received within 2 weeks of the date the assignment or test is returned.

For a remarking request, please submit a written explanation and include a description of possible errors or omissions by the marker. Note that your entire work may be remarked.

Academic Offences:

The work you submit must not contain someone else's words or ideas. Please read Guidelines for Avoiding Plagiarism page by Francois Pitt and Advice about academic offences by Jim Clarke.