Course: ECE 358H1S -- "Foundations of Computing"

Lectures: Monday, Tuesday, Thursday 10-11am Tutorials: Thursday 2-3pm

#### Instructor:

Michael Brudno Office: Pratt 286C 416–978–2789 brudno@cs.toronto.edu

#### E-mail:

You can reach the instructor and TAs at <u>ece358w13@cs.toronto.edu</u>; in fact, I ask that all non-personal course-related e-mails be sent to this address, so that the TAs can also answer them. I will attempt to answer all e-mails sent to this address within 24 hours during the work week (if you do not get a reply, please re-send your message). I may post responses to questions sent to me via e-mail on the newsgroup (after removing the sender's personal information) if I believe the answer to be of general interest.

# **Course Website & Discussion Group:**

Website:<a href="http://www.cs.toronto.edu/~brudno/ece358w13">http://www.cs.toronto.edu/~brudno/ece358w13</a>Newsgroup:<a href="http://groups.google.com/group/ece358w13">http://groups.google.com/group/ece358w13</a>

The course website and discussion group (newsgroup) will contain the most up-to-date information possible regarding the course. I will use the course website to post handouts, information about the course reading and other announcements. I will use the discussion group to answer questions about the homework and anything else of interest to the class as a whole. If you ask us a question that I have already answered on the newsgroup, I will just point you there. I expect that everyone on the class will see announcements made on the newsgroup within 24 hours. You can easily configure Google groups to send you all emails which come to the newsgroup. You are also responsible for all announcements made in lectures and on the course website.

## **Office Hours:**

Both I and one of the TAs will have regular office hours that will be decided during the first week of classes and posted on the course website. I *strongly* advise you to come to office hours if you have any questions or problems with the material. If you cannot make any of the office hours you can request an appointment via e-mail.

## **Textbook:**

The required textbook for the course is *Algorithms* by Dasgupta, Papadimitrou and Vazirani. The textbook will be used for readings and exercises throughout the term, and you should buy a copy of it. In some cases the book is rather terse, hence we recommend that if you do not understand something, you should try to read the corresponding material in the Kleinberg & Tardos' *Algorithm Design* book, available at the library. We will periodically supplement the material with other handouts.

## **General Outline:**

- 1. Divide and Conquer (~2 weeks)
- 2. Greedy Algorithms (~2 weeks)
- 3. Dynamic Programming (~3 weeks)
- 4. Network Flow & Linear Programming (~3 weeks)
- 5. Coping with Hard Problems (~3 weeks)

## **Grading Scheme:**

Your grade will be based on:

- Three Homework assignments and one programming project (8% of your grade each, 32% total)
- Six in-class quizzes (2% of your grade each, lowest quiz score will be dropped, 10% total)
- Two Term Tests February & March (13% of your grade each, 26% total)
- Final Exam (32% of your grade)

The exact dates for each of these will be posted shortly on the course website and the newsgroup.

Note: To pass this course, you must achieve a mark of 40% on the final exam.

## Assignment Submission:

All assignments are due no later than 12pm (noon) on their due date. All assignments must be submitted to the ECE 358 dropbox (location TBA), including assignments submitted late for a lateness penalty (see the next section). If submitting a late assignment, you must indicate this on the cover sheet. Method for submitting programming assignments will be announced later.

If you require special consideration for one of your assignments please hand it in directly to the instructor, or place it in the instructor's mailbox in PT 283. Please include a written explanation and all supporting documentation.

# Lateness Policy:

All assignments are due by 12pm (noon) on their due date, unless otherwise stated. During the semester you are allowed one "slip day", that you can use to submit any assignment late by up to 24 hours. After you have used your slip day, we will penalize you 25% of the value of an assignment for the first 24 hours late, and 100% (you will get a zero) afterwards. Note that lateness penalties will be computed as a percentage of the total marks on the assignment, not of the mark you obtain. Late assignments must be submitted directly into the ECE 358 drop box. This policy will be strictly enforced.

## Policy on remarking requests:

- All remarking requests must be received within **one week** of the date when the assignment or test was returned.
- Your mark will decrease if we find something that was incorrectly awarded too high a mark.
- If there is a simple addition mistake, just show the work to the instructor.
- For *all other* remarking requests, please submit your assignment with a detailed written explanation of why you believe you received too low a mark to the instructor or the head TA. If you are comparing your work to that of another student, hand in BOTH assignments or tests.

## Plagiarism:

Please read the Guidelines for Avoiding Plagiarism page for full details of the course policies and the Faculty's rules. Plagiarism is a form of academic fraud and is treated very seriously. The assignments you hand in must not contain anyone else's work or ideas, without proper attribution. In particular, the actual write-up of your assignments must be done in isolation from others (and without copying from notes or other sources). This ensures that your solution is truly your own, that you understand the course material, and that your grade reflects your own understanding.

The purpose of this course is for you to learn the material, and by committing plagiarism you are hurting yourself. So if you are having trouble with the course come speak to us. That's why we're here!