CSC 364 – Fall 2003

Instructor: Antonina Kolokolova.
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Lectures: MF 2-3pm BA 1180
Instructor office hours: MF 3-4pm.
Tutorials: W 2-3pm. Your tutorial section is determined by the first letter of your last name:
A-J: BA 1180, Tsuyoshi Morioka (morioka@cs)
K-O: UC 85, Phuong The Nguyen (ntp@cs)
P-Z: UC 144, Spyros Angelopoulos (spyros@cs)
TA office hours: on Tuesday before a test, time and place TBA.

If you need to contact me, or set up an appointment, please send me an email. In case of emergency, please contact the DCS main office at 978-6025.

Course Web Site: `http://www.cs.toronto.edu/~kol/csc364/`
All announcements will be posted on the website, as well as answers to frequently asked questions, assignments, solutions and so on. Please check it regularly.

Text: There is no required text. The course notes are posted on the web site. The two books that you might find useful are:
Cormen, Leiserson, Rivest, and Stein: Introduction to Algorithms (Second Edition). The most relevant chapters for this course are 3, 15, 16, 25, 26, and 34. This book covers mainly the first part of the course.
M. Sipser: Introduction to the Theory of Computation. Chapters 3,4,5,7. This book covers topics from the second and third parts of the course.

Course Contents:
Weeks 1 to 5: Polynomial time algorithms and techniques for efficient algorithm design: the greedy method, dynamic programming, maximum flow.
Weeks 6 to 9: The theory of NP completeness: Simple models of computation, two types of polynomial time reducibility, the classes P and NP, intractable problems.
Weeks 10 to 12: Computability Theory: Church-Turing thesis, diagonalization, decidability and undecidable problems.
The last lecture of the course will be a review.

Marking Scheme:
3 assignments worth 5% each (Due Oct 1, Oct 29, and Nov 26)
3 closed book tests worth 15% each (Oct 8, Nov 5, and Dec 3), in tutorial
final exam worth 40%. You have to get at least 35% on the final exam to pass the course.

1/5 rule: For every question or part of a question for which you write "I don't know the answer" you will receive 20% of the mark.

Assignments are due at the *beginning* of the tutorial (that is, no later than 2:10pm). In marking assignments, the style of the written presentation will be a significant proportion of the grade. Each assignment is followed by a closely related test in tutorial, one week later. Please do not submit remarking requests later than two weeks after the assignment/test is returned.

The work you submit must be your own. You may discuss problems with each other; however, you should prepare written solutions alone. Plagiarism is a serious academic offense and will be dealt with accordingly.