Computer Science 2742 – Fall 2011, MUN
Logic in Computer Science

Basic course info:

- *Instructor:* Antonina Kolokolova.

- *Email:* kol@cs.mun.ca. *Office:* ER 6033

- *Lectures:* Tue/Thur 12:00-12:50 and Fri 13:00-13:50 in EN 1051

- *Instructor office hours:* TBA.

Course Web Site: http://www.cs.mun.ca/~kol/courses/2742-f11
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.

Textbook : No required textbook (notes will be posted online).
Reference book 1: "Discrete Mathematics with Graph Theory", Edgar G. Goodaire and Michael M. Parmenter, 3rd edition, 2006.
Reference book 2: "Discrete Mathematics with Applications", Susanna S. Epp, 3rd edition, 2004.

Marking scheme (tentative!):
Assigments: 5 x 7% = 35%, midterm tests: 2 x 15%= 30%, final exam: 35%. Note that the last assignment will be due during the last week of the semester (to provide adequate preparation for the final exam).

Course Contents (tentative!):

- Propositional logic and Boolean algebra.

- Predicate logic and basic set theory.

- Methods of reasoning (incl. induction)

- Applications of logic to artificial intelligence, database systems and program correctness.

- Limitations of logic (intractability and Gödel incompleteness theorem).