CAS 701 — Logic and Discrete Mathematics in Software Engineering

10 September 2007

Outline (to be refined)

Instructor: Dr. Wolfram **Kahl**
Department of Computing and Software
McMaster University

Room: ITB-245

E-Mail: kahl@mcmaster.ca

Office hour: at least Thursday, 12:00-13:20.

Calendar Description

Mathematical objects and logical concepts used in Software Engineering. Higher-order logic. Partial functions and undefined terms. Practical application of the axiomatic method. Recursive definition and inductive proof. Survey of common mathematical structures and axiomatic theories used in Software Engineering. Effective use of mechanized mathematics systems.

Course Pages: http://www.cas.mcmaster.ca/~kahl/CAS701/2007/

This is where you find further information, announcements, and useful links. Electronic versions of the assignment sheets will also be kept there.

It is the student's responsibility to be aware of the information in the course Web pages, and to check regularly for announcements.

Literature: Will be listed on the course page.

Schedule: Monday and Wednesday, within 12:00–14:00, details TBA.

Teaching Assistant: Pablo Castro

Grading:

- **Assignments:** 20% (details to be announced)
- **Presentation:** 10% (details to be announced)
- **Midterm:** 30% if better than Final, otherwise 15%
- **Final Exam:** 40% or 55%

All examinations in this course will be **Closed Book**. That is, no written or printed material nor a calculator may be used during the examinations.

The instructor reserves the right to conduct any deferred exams orally.

Academic Ethics

You are expected to exhibit honesty and use ethical behaviour in all aspects of the learning process. Academic credentials you earn are rooted in principles of honesty and academic integrity.

Academic dishonesty is to knowingly act or fail to act in a way that results or could result in unearned academic credit or advantage. This behaviour can result in serious consequences, e.g. the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: "Grade of F assigned for academic dishonesty"), and/or suspension or expulsion from the university.

It is your responsibility to understand what constitutes academic dishonesty. For information on the various types of academic dishonesty please refer to the Academic Integrity Policy, located at http://www.mcmaster.ca/academicintegrity.

The following illustrates only three forms of academic dishonesty:

(1) Plagiarism, e.g. ***the submission of work that is not one's own*** or for which other credit has been obtained.
(2) Improper collaboration in group work.
(3) ***Copying or using unauthorised aids in tests and examinations.***

Discrimination

The Faculty of Engineering is concerned with ensuring an environment that is free of all adverse discrimination. If there is a problem that cannot be resolved by discussion among the persons concerned, individuals are reminded that they should contact the Department Chair, the Sexual Harassment Office or the Human Rights Consultant, as soon as possible.