CSCB36 – Course Information

Course Description Mathematical induction with emphasis on applications relevant to computer science. Aspects of mathematical logic, correctness proofs for iterative and recursive algorithms, solutions of linear and divide-and-conquer recurrences, introduction to automata and formal languages.



Exclusion (CSCB38H), CSC236H, (CSC238H), CSC240H Prerequisite [CSCA48H & CSCA67H or CSCA65H] plus [CGPA 2.5 or enrolemnent in a CSC subject POSt]

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Textbooks:

CSC236/B36 Introduction to the Theory of Computation by Vassos Hadzilacos available online here:

http://www.cs.toronto.edu/ vassos/b36-notes/notes.pdf

(Extra Resource) *Discrete Mathematics and Its Applications* by *Kenneth Rosen* ISBN 9780073229720. Available from the bookstore or Amazon.ca or Chapters.ca.

Evaluation:

Assignments 3x15=	45%
Midterm 1 x 15	15%
Final Exam	40%

NOTE: See the course website about *academic integrity* before handing in any assignments. No *late* assignments without *prior* permission.

Topics

- Induction (Chapters 1 and 3)
- Functions defined by induction, recurrences (Chapter 3)
- Program Correctness (Chapter 2)
- Formal Languages (Chapters 7 and 8)