CP414: Foundations of Computing
Course Outline

Course Summary

This course is an introduction to the theory of computation. Topics include deterministic and nondeterministic finite automata (DFAs and NFAs), regular expressions, context-free grammars, relationship of push-down automata and context-free grammars, definition of the classes P and NP, NP-completeness (Cook's Theorem), standard NP-complete problems, reduction techniques, Turing machines, the halting problem.

Prerequisite: CP312, MA238

Lectures: M W F 12:30-13:20am, Room: N 1002

Instructor: Eugene Zima

Office: N2087
Phone: x2796
Office Hours: M W 1:30-2:20 pm, or by appointment
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Textbook*: Introduction to the theory of computation*, by Michael Sipser, PWS Publishing Company.

Grading:

Assignments:	30%
In class test 1:	25%
In class test 2:	25%
Quizzes:	20%

Students must pass the tests in order to pass the course (weighted average of 2 tests needs to be greater than 49%).

Important Dates:

Assignment 1:	January 25
Assignment 2:	February 15
Quiz 1:	February 25
Test 1:	March 1
Assignment 3:	March 8
Quiz 2:	March 27
Test 2:	April 3
Assignment 4:	April 5

Assignments

- No late assignment will be accepted.
- Students may request a reassessment of their assignments in writing and specify the reasons for such requests. Their entire assignment will be reassessed and the reassessment may result in raising or lowering of the original marks. Request for reassessment is to be submitted by e-mail to the instructor **no later than 14 days** after posting assignment grade on MyLearningSpace.
- All assignments are to be your own work and collaboration is not permitted.
- More detail will be given in the course web page.

Regulations

For regulations see http://bohr.wlu.ca/courses/regulations.php

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