

CourseCS 5349 – 001 Automata Theory (4384-HON001)ProfessorDr. William J. PervinTermFall 2014MeetingsTR 8:30am-9:45am in ECSN2.120

Professor's Contact Information

Office Phone	972-883-2719 (e-mail preferred)
Other Phone	
Office Location	ECSN4.626
Email Address	pervin@utdallas.edu
Office Hours	TR 10:00am-11:00am, and by appointment
	Send all mail directly to my e-mail address - not eLearning. Watch the
Other Information	web site http://www.utdallas.edu/~pervin/CS5349.html for the most
	current information.

General Course Information

Pre-requisite	CS 5333 (3305).
Course Description	Deterministic and nondeterministic finite automata; regular expressions,
	languages. Selected topics from Turing Machines and undecidability
Learning Outcomes	Students will have the ability to: (1) design finite state automata and regular expressions; (2) convert among DFA, NFA, regular expressions; (3) show that certain languages are not regular; (4) design PDAs and CFGs; (5) convert PDAs to CFGs and vice-versa; (6) show that certain languages are not context free.
Required Texts & Materials	Text: Anil Maheshwari & Michiel Smid "Theory of Computation", <i>free</i> from http://cg.scs.carleton.ca/~michiel/TheoryOfComputation/TheoryOfComp utation.pdf Students must have access to a computer on which they can access the web page for this course and the free material suggested. Notes will be posted on the web page for this course. We will use Prof.
Suggested Readings Texts & Materials	Ullman's <i>free</i> web-course at <u>http://www.coursera.org</u> or eLearning. The text by Sipser is also available on eLearning. The <i>free</i> program JFLAP along with a tutorial are available through <u>http://www.JFLAP.org</u> to
	emulate the machines we study.

Assignments & Academic Calendar [Topics, Reading Assignments, Due Dates, Exam Dates]

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Class Meetings	Chapters from the text. Subject to change at any time!
01: T 08-26	1
02: R 08-28	1
03: T 09-02	2
04: R 09-04	2
05: T 09-09	2 (9-10: Last day to drop without a "W" & Census day)
06: R 09-11	2
07: T 09-16	2
08: R 09-18	2
09: T 09-23	2
NC: R 09-25	No Class
10: T 09-30	Review

E1: R 10-02	EXAMINATION 1 (25%) Chapters 1, 2
11: T 10-07	3
12: R 10-09	3
13: T 10-14	3
14: R 10-16	3 (Mid-semester grades based on Examination 1)
15: T 10-21	3
16: R 10-23	3
17: T 10-28	3
18: R 10-30	3 (Undergraduate Withdrawal ends)
19: T 11-04	Review
E2: R 11-06	EXAMINATION 2 (25%) Chapter 3 (Graduate Withdrawal ends 11/10)
20: T 11-11	4
21: R 11-13	4
22: T 11-18	4
23: R 11-20	4
FB: T 11-25	Fall Break
FB: R 11-27	Fall Break
24: T 12-02	5
25: R 12-04	5
26: T 12-09	6
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Exam Dates and Times	Examination 1: 2 October (25%) 8:30am-9:45am (usual class R)
	Examination 2: 6 November (25%) 8:30am-9:45am (usual class R)
	Final Examination: TBA : Probably 16 or 18 December (40%)
	8:00am-10:45am (usual classroom T/R) TBA

Course Policies

Grading (credit) Criteria	On each examination, each question will be graded subjectively but as
	uniformly as possible. The final score will then be analyzed subjectively but
	on the basis of previous experience and equated to a letter grade. The letter
	grades for the examinations will then be calculated and a final grade
	assigned by strict calculation assigning numerical values to the letter grades.
	Homework will count 10% and is absolutely essential if one wishes to pass
	this course. Students should try even more than any required problems.
Make-up Exams	None given unless excellent medical excuse verified
Extra Credit	None
Late Work	Not accepted without excellent verified medical excuse
Special Assignments	None
Class Attendance	While not required, strongly recommended since examinations may include
	material introduced only in class. Arrive on time! Pay attention!!
Classroom	General good behavior with cell phones silenced required. Questions are
Citizenship	encouraged! Playing on your computer is discouraged!!
Field Trip Policies	None
UT Dallas Syllabus	The information contained in the following link constitutes the University's
Policies and	policies and procedures segment of the course syllabus.
Procedures	Please go to http://go.utdallas.edu/syllabus-policies for these policies.

These descriptions and timelines are subject to change at the discretion of the Professor.