Math 118 – Spring 2017

My Contact Information:

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Office Hours:	Monday, 10:00am – 11:00am
	Tuesday, 1:00pm – 2:00pm
	Friday, 10:00am – 11:00am

Content:

In this course we'll learn about Language Theory as a tool for solving combinatorial problems. The course will cover many classical topics—finite automata, regular automata, and context-free grammars—as well as a selection of more advanced topics, including transducers, Ogden's Lemma, and decidability problems. Along the way, we'll present many applications of language theory to combinatorial problems.

Textbook:

This class will use my own lecture notes, which will draw from several sources. A great recommended textbook for this course is *Introduction to the Theory of Computation*, by Michael Sipser.

X-hour:

We will use the X-hour occasionally throughout the quarter, so be sure not to schedule anything during that time (1:20pm - 2:10pm, Thursday). When we use the X-hour, Tuesday office hours will be canceled.

Grading Scheme:

There will be a total of 200 possible points to be earned through four homework assignments. Grades will be assigned according to the following scale.

High Pass:	175 – 200 points
Pass:	125 – 174 points
Low Pass:	100 – 124 points
Fail:	0 – 99 points

Homework Policy:

You may, and in fact are encouraged to, discuss the homework problems with your classmates. However, each student must turn in their own assignment, in their own words. It is expected that you fully and completely understand the work you turn in; if not, you have relied too much on your classmates.

Returned Papers:

You must retain all returned papers in case of any discrepancy with my recorded grades. I cannot correct any mistakes in grading or recording of scores without the original document. All concerns regarding grades on assignments or exams must be handled within one week of the return of the paper.

Disabilities

Students with disabilities who may need disability-related academic adjustments and services for this course are encouraged to see me privately as early in the term as possible. Students requiring disability-related academic adjustments and services must consult the Student Accessibility Services office (205 Collis Student Center, 646-9900, Student.Accessibility.Services@Dartmouth.edu). Once SAS has authorized services, students must show the originally signed SAS Services and Consent Form and/or a letter on SAS letterhead to me. As a first step, if you have questions about whether you qualify to receive academic adjustments and services, you should contact the SAS office. All inquiries and discussions will remain confidential.

Religious Observances

Some students may wish to take part in religious observances that occur during this academic term. If you have a religious observance that conflicts with your participation in the course, please meet with me before the end of the second week of the term to discuss appropriate accommodations.

Academic Honor Principle

The faculty, administration, and students of Dartmouth College recognize the Academic Honor Principle as fundamental to the education process. Any instance of academic dishonesty is considered a violation of the Academic Honor Principle.

Fundamental to the principle of independent learning are the requirements of honesty and integrity in the performance of academic assignments, both in and out of the classroom. Dartmouth operates on the principle of academic honor, without proctoring of examinations. Any student who submits work which is not his or her own, or commits other acts of academic dishonesty, violates the purposes of the college and is subject to disciplinary actions, up to and including suspension or separation.

The Academic Honor Principle depends on the willingness of students, individually and collectively, to maintain and perpetuate standards of academic honesty. Each Dartmouth student accepts the responsibility to be honorable in the student's own academic affairs, as well as to support the Principle as it applies to others.

The full text of the Academic Honor Principle can be found here:

https://students.dartmouth.edu/judicial-affairs/policy/academic-honor-principle.