CS 378: Declarative Programming
Spring 2019

Unique Number:	51100
Time and Place:	MWF 2–3, RLP 1.106
Instructor:	Vladimir Lifschitz (`vl@cs.utexas.edu`)
Office Hours:	W 1–2, GDC 3.808, and by appointment
Teaching Assistant:	Alfred Zhong (`alfredzhong@utexas.edu`)
TA's Office Hours:	T 11–12 and F 3–4, GDC basement,
	and by appointment

Traditionally, the programmer solves a computational problem by designing an algorithm and encoding it in an implemented programming language. Research in artificial intelligence and computational logic has led to an alternative, "declarative" approach to programming, which does not involve encoding algorithms. A program in a declarative language only describes what is counted as a solution. Given such a description, a declarative programming system finds a solution by the process of automated reasoning.

In this class, you will learn to use the declarative programming tool CLINGO, which has found applications in many areas of science and technology, and you will study the theory behind its input language.

A draft of the forthcoming book *Answer Set Programming*, posted online, will be used in this class as a textbook. There are many exercises in the book, with answers given in the appendix, and you are expected to work on these exercises to prepare for tests and quizzes.

Your grade will be determined by three open-book tests (20% each), several open-book quizzes (20%), and several programming assignments (20%). There will be no final. The tests will be given during regular class periods on or around February 22, April 5, and May 10. The quizzes will be given on most Mondays, at the end of the class period, and cover the material discussed in class during the previous week. The lowest quiz score will be dropped.

Except for emergencies, you must take each test and each quiz at its scheduled time. If we have made a mistake in grading your work then you should send the TA an e-mail message describing the problem within a week after we return the graded work to the class.

Students with disabilities may request appropriate academic accommodations from the Division of Diversity and Community Engagement, Services for Students with Disabilities, 512-471-6259.

Information on the classes taught by Vladimir Lifschitz, and a link to the textbook for CS 378, can be found at

<center>http://www.cs.utexas.edu/users/vl/teaching/.</center>