

Computer Engineering 259

Compiler Construction and Optimization

Spring 2005
Mondays and Wednesdays
5:10 pm – 7:00 pm
ENGR 105

Instructor

Instructor: Darren Atkinson
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Textbooks

Required: Aho, Sethi, and Ullman, *Compilers: Principles, Techniques, and Tools*, Addison-Wesley, 1986.
Recommended: Mason, Levine, and Brown, *lex & yacc*, 2nd edition, O'Reilly, 1992.

Grading

First exam:	30%	(4/27)
Second exam:	30%	(6/6)
Nonoptimizing compiler:	20%	(5/4)
Optimizing compiler:	20%	(6/1)

Overview

This course will discuss the practice of building a compiler. The exams will mostly cover aspects of compiler design and optimization. The project will require you to build a simple compiler for a subset of the C language. You will implement the project in either the C or C++ programming language. All work must be done individually. The project will be delivered and graded in two stages: a working compiler without any optimizations and an enhanced version with optimizations. Your project must work on the Solaris machines in the design center.