

Computer Engineering 175
Introduction to Formal Languages and Compiler Construction
Winter 2002

Mondays, Wednesdays, and Fridays
9:15 AM – 10:20 AM
ENGR 304

Instructor

Instructor: Darren Atkinson
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Office hours: Mondays 10:30–11:30 AM, Wednesdays 10:30–11:30 AM and 2:00–3:00 PM
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Teaching Assistant

Teaching assistant: Vishal Bhargava
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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

There will be a term project and two exams. The overall weighting is as follows:

First exam: 25%
Second exam: 25%
Project: 50%

Overview

This course will discuss the theory and practice of building a compiler. The exams will mostly cover the theoretical aspects of formal languages and compiler design. The project will require you to build a simple compiler for a subset of the Pascal language. You may implement the compiler in any language you choose. However, resources and examples will be provided for the C, C++, and Java languages. You may work in teams of up to three people. However, team projects will be more comprehensive than individual projects. The project will be delivered and graded in four stages: lexical analysis, syntax analysis, semantic analysis, and code generation.