CSE 401: Introduction to Compiler Construction

Professor: Susan Eggers
TA: Brian Michalowski
Guest lecturer: Wilson Hsieh

Text: *Compilers: Principles, Techniques, and Tools*
Aho, Sethi & Ullman

Goals:

- learn principles & practice of language implementation
  - brings together theory & pragmatics of previous courses
- study interactions among:
  - language features
  - implementation efficiency
  - compiler complexity
  - architectural features
- gain experience with object-oriented design & C++
- gain experience working on a team

Prerequisites:

- 326, 341, 378
- very helpful: 322

Project

Start with compiler for PL/0, written in C++

Add:

- comments
- arrays
- call-by-reference arguments
- results of procedures
- for loops
- break statements
- and more...

Completed in stages over the quarter

Work in a 2-person team

Grading based on:

- correctness
- clarity of design & implementation
- quality of test cases

Grading

Project: 40-45% total
Homework: 20% total
Midterm: 15%
Final: 20-25%

Homework & projects due at the **start of class**

2 free late days, per team

- thereafter, 25% off per calendar day late