

ENPM808T: Compilers – Fall 2018 Course Syllabus

Instructor: Jerry Wu, 2369 A.V. Williams Bldg; 301-275-3733, jerrywu@umd.edu

Office Hours (TBD): Tu: 3:20-4:20pm; Th: 1:00-2:00pm, prefer by appointment

Course Objectives: The course is intended to cover the underlying techniques of Compiler Construction. The course will introduce the theory and tools that can be employed in order to perform syntax-directed translation of a high-level programming language into an executable code.

Textbook: Compilers Principles, Techniques, & Tools, Alfred Aho, Monica Lam, Ravi Sethi, and Jeffrey Ullman, 2nd Edition.

Core Topics:

1. Overview of Compilers
2. Lexical analyzer
3. Parser
4. Intermediate code generation
5. Syntax Analysis
6. Top-down and bottom-up Parsing
7. Dataflow Analysis
8. Syntax-Directed Translation
9. Intermediate code generation
10. Type Expression and Register allocation
11. Translation of Boolean Expressions
12. Code Generator
13. Advance Topics

Midterm and Final schedules: TBD

Homework and Quizzes: Homework will be bi-weekly or weekly (no late homework will be accepted); There may be pop-quizzes.

Course Structure: Students are required to have basic programming experience (C or equivalent).

Course Grade: Homework and/or Quizzes (5%), Midterm (45%), Final (50%).

No exam make-up will be given except for serious documented illness.

The University of Maryland, College Park has a nationally recognized Code of Academic Integrity, administered by the Student Honor Council. This Code sets standards for academic integrity at Maryland for all undergraduate and graduate students. As a student you are responsible for upholding these standards for this course. It is very important for you to be aware of the consequences of cheating, fabrication, facilitation, and plagiarism. For more information on the Code of Academic Integrity or the Student Honor Council, please visit <http://www.studenthonorcouncil.umd.edu/whatis.html> .