School of Computer Science and Mathematics
College of Health, Science, and Technology
University of Central Missouri
Course Syllabus
CS 5900 – Compiler Design & Construction

Instructor: Mohammad Rawashdeh   **Office:** MIC D158
Email: rawashdeh@ucmo.edu   **Office Hours:** M, 3:00 PM – 5:00 PM
                                                                    T, 1:30 PM – 2:30 PM
                                                                    (and by appointment)

Purpose of the Course: This course is designed for computer science students and is intended to introduce them to the fundamental concepts of compiler construction. Compiler construction is an important branch of computer science. Studying the parts of a compiler and compiling process is essential in the understanding of any language.

Course Outcomes: upon completion of this course the student should be able to
- Understand grammars and finite automata, and languages, to be used in scanning and parsing.
- Implement various phases in the compiling process.

Text
1. *Compiler Construction Principles and Practices*, Kenneth Louden, PWS 1997.
2. *Compilers: Principles, Techniques, and Tools*, Alfred V. Aho, 2nd edition, AWI 2006.

Tentative list of topics to be covered:
A. Introduction
B. Scanning
C. Context-Free Grammar
D. Top-Down Parsing
E. Bottom-Up Parsing
F. Semantic Analysis
G. Code Generation

Procedures/Assessments:
- **Tests (200 pts.):** There will be two tests. Each is worth 100 points. Make-up tests will be given only for absences if determined by the instructor to be acceptable, probably if documented and approved by the Office of Student Experience and Engagement (ADM 214). Scheduling of the make-up test is the student's responsibility.
- **Quizzes and homework assignments (100 pts.):** No make-up.
- **Grading Scale:** the typical grading scale below:

Percent	Grade
90 – 100	A
80 – 89	B
70 – 79	C
60 – 69	D
below 60	F

Attendance Policy: Attendance will be taken every class. Students are expected to attend every class on time, otherwise, it might significantly affect their final grade.

Academic Honesty: Plagiarism or cheating might result in failing the course. Any case will be dealt with in accordance with UCM academic policies and procedures.