COSC 442 *Organization of Programming Languages*

Description: Organization of Programming Languages is a course on the fundamental principles of programming languages, introduction to fundamental principles and techniques in programming languages design and implementation. (Three hours lectures per week.)

References: *Concepts of Programming Languages,* by Robert W. Sebesta (12th Edition), 2019 Pearson; *Programming Language Concepts & Construction,* by Ravi Sethi (2nd Edition), 1986 Addison Wesley Press

Topics:
- Preliminaries of concept of programming languages
- History of the major programming Languages
- Describing Syntax and Semantics
- Lexical and Syntax Analysis
- Names, Bindings and Scope rules
- Data Types
- Expressions and Assignment Statements
- Control Structures
- Subprogram & implementing Subprogram
- Abstract Data Types and Encapsulation Construct.
- Support for Object-Oriented Programming
- Functional Programming Language – Common Lisp
- Logical Programming Languages

Grade: Test 1- 20 %, Test 2 – 20 %, Final – 30 %, Mini Test – 30 %. Your final grade will be based on the standard formula:

o **A**: $90 \leq$ Total_Average_score
o **B**: $80 \leq$ Total_Average_score <90
o **C**: $70 \leq$ Total_Average_score <80
o **D**: $60 \leq$ Total_Average_score <70
o **F**:   Total_Average_score <60

Exam Policy: There will be an announcement one week before each exam. And also, it will be posted on my web page. There will be no make-ups or rescheduling of exams for individual cases (except emergency cases with evidence).

Attendance: Each student is expected to be present each lecture and lab. Attendance will be checked for each class. If a student misses lectures more than 5 times without any reason with evidence, he/she will lose 3% from the total average score. If a class must be missed, however, students are responsible for all material, assignments, and announcements made during class.

Laptop & Smart Phone Policy: Students cannot use his/her own laptop durin a lecture without special permission.