COMP 5220, Advanced Topics in Programming Languages

Credit hours: 3 lecture
Contact hours: 3 lecture

Catalog Description: Advanced topics in programming language concepts, design, and implementation.

Prerequisites: COMP 3220
Corequisites: None

Selected Elective Course (CSCI, SWEN, WIRS)

Instructor or Course Coordinator: Dr. Jeff Overbey

Required Textbook

Course Outcomes
To provide greater depth into the topics of COMP 3220 as a base for graduate work or a background for research topics in programming languages.

Topics Covered
- Review of Concepts of Programming Languages (3 hours)
- Control Structures (3 hours)
- Type Theory (6 hours)
- Object Oriented Programming Concepts and Theory (6 hours)
- Dataflow (3 hours)
- Concurrent Programming (6 hours)
- Logic Programming (6 hours)
- Aggregates (3 hours)
- Formal Syntax and Semantics (6 hours)
- Case Studies (1 hour)
- Exams (2 hours)

Course Requirements
- Homework Assignments (40%)
- Exams (60%)

Syllabus prepared: Spring 2016