

University of North Alabama  
Departmental Syllabus

COURSE: CS 410

COURSE TITLE: Programming Languages

CREDIT: 3 Semester hours

PREREQUISITE: CS 355

COURSE DESCRIPTION: Formal study of programming language concepts; syntax, characteristics of grammar's such as context-free and ambiguous; Backus-Naur form; organization of programming languages such as block structures, list processing, etc.

COURSE OBJECTIVE: The student will be exposed to different types of languages so that they may better select a language when needed, better understand the languages they already use and help in designing new languages.

COURSE CONTENT:

1. Historical Background	6. Abstraction
2. Syntax and Semantics	7. Concurrent Programming
3. Data Types	8. Logic Programming
4. Control Structures	9. Object Oriented Programming
5. Subprogram	

COURSE REQUIREMENTS: Students will be expected to complete programming projects in several different languages including Pascal, FORTRAN, PROLOG, and LISP. A midterm and final exam will also be given. A research paper will be required of each student with a class presentation following completion of the paper.

EVALUATION: The midterm exam will represent 30% of the course grade. The final will represent 30% of the course grade. The combined score from the programs will represent 20% and the research paper will also represent 20% of the course grade.

***NOTE: Students taking the course for graduate credit will be assigned additional work appropriate to the graduate level. This work may include an additional research paper, project, or presentation.***

**Accommodation Statement:** In accordance with the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act of 1973, the University offers reasonable accommodations to students with eligible documented learning, physical and/or psychological disabilities. Under Title II of the Americans with Disabilities Act (ADA) of 1990 and Section 504 of the Rehabilitation Act of 1973, a disability is defined as a physical or mental impairment that substantially limits one or more major life activities as compared to an average person in the population. It is the responsibility of the student to contact Developmental Services prior to the beginning of the semester to initiate the accommodation process and to notify instructors within the first three class meetings to develop an accommodation plan. Appropriate, reasonable accommodations will be made to allow each student to meet course requirements, but no fundamental or substantial alteration of academic standards will be made. Students needing assistance should contact Development Services.