UCF

School of Computer Science
COP 4020 Programming Languages I
Summer 2006

Syllabus

Professor : Euripides Montagne Tele.: 823-2684 email:eurip@cs.ucf.edu
Lecture meetings:
MW 12:00 p.m. – 1:50 p.m. (CSB 221)
Office hours: MW from 2:00 a.m. to 4:00 a.m (CSB 239)
TR from 12:00 p.m. to 1:50 p.m (CSB 239)

TA : Alex Cook Tele.: 968-7979 email: acook@cs.ucf.edu
Office hours: TR from 4:45 p.m. to 5:45 p.m. (CSB 114)
Website: **http://www.cs.ucf.edu/courses/cop4020/sum2006/**

Course Objective:
This course is designed to provide a fundamental understanding of the design and implementation issues surrounding programming languages. Students will be exposed to a variety of programming languages during the course including functional and logic languages.

Course Topics:
History of programming languages. Fundamental concepts of programming languages, such as scope, binding, abstraction, encapsulation, typing etc. Object-oriented, functional and logic programming paradigms. Lambda calculus. Operational semantics, axiomatic semantics, and denotational semantics.

Prerequisites: COP 3530C

Required textbook:
Concepts of Programming Languages, 7th edition, Robert Sebesta, Addison-Wesley 2006, ISBN: 0-321-33025-0.
The text will be supplemented with additional notes that I will provide for you via the course web site.

Style of Class Meetings:
Class meetings will not consist of traditional lectures, with the instructor doing most of the talking and the student doing most of the listening. Rather, meetings will consist of discussions on each topic and the instructor will help guide the discussion by asking questions.

Grading Policy:
- (30%) **First Midterm exam** – closed book, closed notes exam given in class.
- (30%) **Final Exam** – closed book, closed notes comprehensive exam given during final exam week.
- (30%) 3-4 programming assignments

- (10%) Scribing: Each team will be expected to scribe (i.e. generate typeset lecture notes for) one of the technical lectures, and the following week they must turn in a power point presentation or word document based on the class notes.

Letter grades: 90% - 100% = A ; 80% - 89% = B; 70% - 79% = C

Note: Any academic dishonesty (including, but not limited to, Cheating, copying and/or plagiarism) with respect to any exam or assignment in this class will result in a grade of **F**, following by the usual procedures for dealing with such behavior, as describe in the *UCF Golden Rule : a handbook for students.*

The Semester Plan: Tentative.

1. Introduction and Preliminaries: Chapter 1
2. History and Evolution: Chapter 2
3. Functional Programming and Lisp: Chapter 15
4. Syntax and Semantics (parsing, CFGs, and dynamic semantics): Chapter 3
5. Binding, Scope, and Data Typing: Chapters 5 and 6
6. Expressions, Assignment Statements, and Control Structures: Chapters 7 and 8
7. Logic Programming and Prolog: Chapter 16
8. Subprograms: Chapters 9 and 10
9. Concurrency: Chapter 13
10. Lexical and Syntactic Analysis: Chapter 4 (time permitting)
11. Exception Handling and Event Handling: Chapter 14 (time permitting)

This is a general time frame only and is subject to the needs of the class. It will be altered without notice, but will generally follow the same progression. At the end of each class I will tell you what we will be discussing during the next class period.

Important Dates:

Last Day to Withdraw: June 23rd
Midterm Exam: June 21st
Final Exam: Wednesday August 2nd (12 p. m. to 1:50 p. m.)
Holidays: Memorial Day: May 29th.
Independence Day: July 4th.