CS 256 Principles of Programming Languages

Spring 2006 MWF 2:20pm – 3:30pm PPHAC-117 http://www.cs.moravian.edu/cs256

CS 256. Principles of Programming Languages

The study of features of programming languages and of the methods used to specify and translate them. Topics covered include block structure, naming, procedure invocations and parameter passage, data types, data accessing, syntactic analysis, and correspondence of source language and object language constructs. Prerequisite: CS 244.

Instructor:

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Text:

The text for the course is <u>Concepts of Programming</u> Languages, 7/e, by Sebesta.

Goals:

- Explore programming language design and implementation issues.
- Explore the various types of programming languages including imperative, functional, and domain specific languages.
- Write programs in representative languages.

Assignments, Programs, and Tests:

Homework and programming assignments will include small programs in various programming languages. Tests will consist of three hour exams and a final. Projects will primarily consist of writing assignments, but will likely include one final oral presentations.

Computer Resources:

The primary computer resources will be the Sun Solaris 2.x workstations in MoCoSIN. Unless otherwise indicated, all programs must compile and run on this platform.

Prerequisites:

Students are expected to have a strong background in structured programming and basic data structures as covered in CS 120-121-244.

Grading Scale:

Homework and Quizzes	10
Programs	25
Projects	15
Hour Exams	25
Final Exam	25
Total	100 %

Grading Policies:

- Incomplete grades will **not** be assigned for failure to do the work as required during the semester.
- Attendance is very important, and pop quizzes, which would count in the homework category, may spontaneously occur. You are responsible for everything discussed in class.

Homework:

Each homework (non-program) will be graded out of a possible 100 points. Late homework will be penalized with the same schedule as late programs (see below), unless the solution is discussed in class.

Programs:

- Each program will be graded out of 100 points, but may be weighted to reflect its relative complexity. Programs will be graded on correctness (~70%), style (~20%), and documentation (~10%). If an assignment is one *class-day* late, it will be penalized 10%. If it is up to one *class-week* late, it will be penalized by 30–50%. After one classweek, it will be worth no more than 20%.
- Unless explicitly stated otherwise, programs are due electronically on midnight on the due date.
- Failing to turn in correct programming assignments in a timely fashion is hazardous to your grade, directly and indirectly. If you start missing assignments, I will notify your academic advisor.

Keep in mind the following items about submitting pro- Important Dates grams.

- 1. Program source files must contain the program header in a comment section as well as a code section. This header consists of the program title, number, author, course, and due date.
- 2. Programs are collected electronically. Pay close attention to directory and files names, including case.
 - You must execute touch DONE in the proper directory.
 - A collect program will periodically look for these DONE files.
 - If the DONE file is found, the contents of the directory will be copied, a .collected file will be deposited, and a congratulatory email message will be sent.
 - If no DONE file is found, an email will be sent pointing out that no collection was done.
 - If you are asked to resubmit a program you must delete (rm) the .collected file and touch DONE again. You must also physically resubmit the grading worksheet.

Tests:

No makeup exams will be given. Students missing one or more tests, in a properly excusable fashion, will be graded based on the available scores as the total score. The hour exams are open book and open notes, unless explicitly stated otherwise.

Jan 15	Μ	First day of classes
Jan 23	Т	Last Day to Add/Drop
Feb 16	F	Hour Exam I
Feb 23	F	Midterm
Mar 3–11	S - U	Spring Break
Mar 16	F	Hour Exam II
Mar 30	F	Last Day to Withdraw with a W
Apr 6–9	F–M	Easter Break
Apr 13	F	Hour Exam III
Apr 27	F	Last Day of Classes
Apr 30–May 4	M - F	Final Examinations
May 12	S	Commencement

General

- Keep backups of all assignments, especially during program development.
- Special circumstances, will, of course, be considered on an individual basis. Please see us as soon as possible if any such circumstances arise.
- All work, unless explicitly stated in the problem definition, is to be an individual effort. Students are encouraged to discuss approaches so long as the final submission has a single, clearly identifiable author. Violations of this will be dealt with as a case of academic dishonesty, see below.

My Policy on Academic Dishonesty:

Students are encouraged to read and understand the college policy on academic honesty. Violations of this policy will certainly result in reduced (0?) scores on the assignments and may result in a failure of the class.