

CIS 190

Introduction to Procedural Programming

Spring 2007

Lecture session: Monday, Wednesday, Friday: 11:00 - 11:50am, Dion 101

Lab sessions: Tuesday 8 – 9:50am, Dion 305

Instructor:

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DION 302D

TA:

Mr. Dan MacLean

Contact info: TBA

Office hours:

Monday, Wednesday 2 - 4pm; Friday 2 - 3pm; or by appointment

Textbook:

Required: Kelley, Pohl, "A Book on C", Addison Wesley, 1998

Sarwar, Koretsky, Sarwar, "Linux: the Textbook", Addison Wesley, 2002

Course pages:

http://www.cis.umassd.edu/~ivalova/Spring07/Spring_title.htm

<http://www.cis.umassd.edu/~ivalova/Spring07/cis190/CIS190.htm>

<http://web.cis.umassd.edu>

Course Description: Procedural Programming (C/C++) under Unix. Data types, variables declarations, arithmetic expressions, conditional statements, macros, function prototypes, standard libraries, file processing, pointers, structures, unions, and dynamic memory management are discussed. Unix file system, shell scripts, input/output redirection, piping, programming with standard I/O, and Unix system calls are covered.

Course requirements: You are expected to take an active role in your learning in this course. This includes regular attendance, paying attention in class, reading the textbook, and completing all course requirements. You are encouraged to study with your classmates outside of class.

There will be 2 exams, unannounced quizzes, and a Final exam, projects, homework, and lab programming assignments. The material of all exams will come from either a material covered in class, homework problems, and/or assignment readings. Complete all required work on time and submit through the Learning Portal. No other forms of submission will be accepted. All assignments are individual unless otherwise stated. In the event that an exam must be missed, or required work cannot be completed on time, due to illness or other serious and unavoidable circumstance, notify the professor as far in advance as possible by phone or e-mail. Make-up exams will not be given for any reason.

Pagers, cell phones, and other distracting devices are to be disabled in class and lab. Lab attendance is **NOT** optional, it is required. For every two lab absences your final grade will be reduced by a fraction of a letter grade (e.g., B to B-).

Do not to suffer in silence, bring any grievance to the professor promptly. Seek clarification of unclear points or assignments in class by asking about them then and there. Seek extra help during office hours as soon as it is needed. When seeking assistance from the instructor on projects and homework, you will be expected to provide evidence that you have tried alternatives and explored the problem. Be ready to ask and answer specific questions about your efforts.

The evaluation will be based on: the exams and quizzes (appr. 30%), projects (appr. 30%), lab and homework (appr. 20%), and final exam (appr. 20%).

Grading table:

A: 100 - 93.3; A-: 93.2 - 90.0; B+: 89.9 - 86.7; B: 86.6 - 83.3; B-: 83.2 - 80.0; C+: 79.9 - 76.7; C: 76.6 - 73.3; C-: 73.2 - 70.0; D+: 69.9 - 66.7; D: 66.6 - 63.3; D-: 63.2 - 60.0; F: 59.9 - 00.0

Academic honesty:

You are encouraged to discuss assigned problems with other people but you must individually design and write your own solutions / code for all assignments. Furthermore, you should explicitly acknowledge any sources of ideas used that are not your own; this includes other people, books, web pages, etc. Submitting modified versions of other people's work as your own is considered cheating. Assignments whose appearance is identical to someone else's will be given 0 points for all offenders.

Tentative schedule:

C language:

Lexical elements, syntax rules, identifiers and constants
Variables, operators, control flow and data types
Functions, prototypes, and program structure
Arrays
Structures
Input and output including files
Pointers and dynamic memory allocation
Lists, stacks and queues

UNIX

The file system, using the shell
Filters - family of grep, awk, and sed
Shell programming - scripting
Programming with standard I/O
UNIX system calls

Final exam – as scheduled by the Registrar's Office.