CSC 406 –Systems I
Winter 2012-2013
Prof. Marrero

Course Summary
This course covers the concepts underlying all computer systems and how they affect the correctness, performance, and utility of application programming. We will cover, in particular, information representations, program representations and execution, and the memory hierarchy.

Prerequisites
The prerequisite for this course is CSC401. The assumption is that you are already familiar with structural programming concepts like branching, loops, functions, arrays, etc.

The C programming language and the UNIX environment
We will be using C and UNIX extensively in this course; however, the purpose of this course is not to teach you C and UNIX. This course requires you to read, understand, and sometimes write small programs in C and to interact with a Linux server. I will provide a very brief introduction just to get you started, and I will answer questions about C and Linux in class, but students are expected to pick up C and UNIX on their own. This will require a great amount of time interacting with the Linux server, writing and debugging programs, and looking things up in UNIX and C manuals.

Grading Policy

Lab Projects	40%
Online Quizzes	10%
Midterm Exam	25%
Final Exam	25%

Overall grades will be assigned as follows:

93-100	A
90-92	A-
87-89	B+
83-86	B
80-82	B-
77-79	C+
73-76	C
70-72	C-
67-69	D+
60-66	D
0-59	F

Textbooks and Printed Resources

Computer Systems: A Programmer's Perspective, 2nd Edition. Bryant & O'Hallaron, Prentice Hall/Pearson, 2011. ISBN: 978-0136108047

Systems Programming with C and Unix. Hoover, Addison-Wesley/Pearson, 2009. ISBN: 978-0136067122

Lab Projects

The heart of this course are the three labs that students will be doing. Each of these labs requires a significant amount of time and work to complete. They really are projects and not homeworks. Students are urged to start early. Each lab has multiple pieces and is automatically graded so you can check your progress as you go. Note that late submissions will not be accepted. Whatever grade the server reports at the submission deadline will be your grade for the lab.

All labs are individual work. Students are expected to solve the problems on their own. Searching for answers to the problems online is considered cheating and will result in an F for the course. You are certainly welcome and encouraged to seek help with how to use the various tools. If you are ever unsure about whether some reference/resource is allowed, please just ask.

Quizzes

Quizzes will be handled online on the D2L site for the course. Expect a quiz every week. Quizzes must be completed before 5:45PM server time on Tuesdays. Late quizzes will not be accepted and will receive a grade of 0, so make sure to finish them early.

Exams

The midterm exam is on Tuesday, February 12, at the usual class time. Online students must take the midterm exam either on February 12 or February 13. The final exam is on Tuesday, March 19, at the usual class time and in the usual classroom. Online students must take the final exam on either March 19 or March 20. Clear your schedule now. If you know you have a conflict, please register for a different section of the course. There are no make-up exams.

In class students: Both exams will take place in the regular classroom.

Online students: Make sure to register for the exam on COL. If you are a local student you must make arrangements to take the exam at a DePaul campus. If you are not local, you must arrange for a proctor. All online students should be familiar with their rights and responsibilities as outlined here:

http://blogs.cti.depaul.edu/colwiki/Wiki Pages/Course OnLine Guide For Students.aspx

Students may bring a single 8.5" by 11" sheet of notes (both sides) to the exams, but no other resources will be allowed. The sheet of notes must be turned in with the exam and will not be returned. Please make a copy for yourself before bringing it to the exam.

Warning to DL students

In the past, I have had remote students who thought they were registered for the DL section. When it came time to take the exams, administration would not allow them to take the exam remotely and so they received a 0 for the exams. Make sure this does NOT happen to you! You do not need to register now, but you should at least verify that you can register for the midterm and final exams. If you cannot, you are in the "live" section and you must take the exam in class.

Course Server and Required Software

All lab work must be done on the UNIX server for the course. This will require you to have some kind of terminal/telnet application as well as an FTP application that uses SSH. You can find a link to PuTTY in the Content section of D2L. You will need both PuTTY and PSCP.

The hostname is wmarrerowww.cstcis.cti.depaul.edu. Your username is the first letter of your first name followed by at most the first 7 letters of your last name. Your password is your DePaul student ID including leading zeroes if there are any. Please change your password as soon as you login by typing in "passwd" (without the quotes) and then following the instructions.

Accounts will be generated by the class roster on the first day of class. If you cannot login, contact the instructor ASAP especially if you registered late for the course. You may not have an account yet.

You will also need to become familiar with its text/terminal based tools, including the editor (either emacs or vi), the compiler (gcc), and the debugger (gdb). See the Documentation module under Content on D2L as well as the Hoover text for some help if you are unfamiliar with these tools or with the UNIX command line interface.

Online Teaching Evaluation

Evaluations are a way for students to provide valuable feedback regarding their instructor and the course. Detailed feedback will enable the instructor to continuously tailor teaching methods and course content to meet the learning goals of the course and the academic needs of the students. They are a requirement of the course and are key to continue to provide you with the highest quality of teaching. The evaluations are anonymous; the instructor and administration do not track who entered what responses. A program is used to check if the student completed the evaluations, but the evaluation is completely separate from the student's identity. Since 100% participation is our goal, students are sent periodic reminders over three weeks. Students do not receive reminders once they complete the evaluation.

Email

Email is the primary means of communication between the instructor and students enrolled in this course outside of class. All students must make sure that the email address listed for them under "demographic information" on campus connect is correct.

Academic Integrity Policy

This course will be subject to the faculty council rules on the Academic Integrity Policy

Plagiarism

The university and school policy on plagiarism can be summarized as follows: Students in this course, as well as all other courses in which independent research or writing play a vital part in the course requirements should be aware of the strong sanctions that can be imposed against someone guilty of plagiarism. If proven, a charge of plagiarism could result in an automatic F in the course and possible expulsion. The strongest of sanctions will be imposed on anyone who submits as his/her own work a report, examination paper, computer file, lab report, or other assignment which has been prepared by someone else. If you have any questions or doubts about what plagiarism entails or how to properly acknowledge source materials be sure to consult the instructor.

Incomplete

An incomplete grade is given only for an exceptional reason such as a death in the family, a serious illness, etc. Any such reason must be documented. Any incomplete request must be made at least two weeks before the final, and approved by the Dean of the College of Computing and Digital Media. Any consequences resulting from a poor grade for the course will not be considered as valid reasons for such a request.

Resources for Students with Disabilities

Students who feel they may need an accommodation based on the impact of a disability should contact the instructor privately to discuss their specific needs. All discussions will remain confidential.

To ensure that you receive the most appropriate accommodation based on your needs, contact the instructor as early as possible in the quarter (preferably within the first week of class), and make sure that you contact the Center for Students with Disabilities (CSD) at:

Student Center, LPC, Suite #370
Phone number: (773)325.1677
Fax: (773)325.3720
TTY: (773)325.7296