CSI 402 – Systems Programming – Spring 2014
Course Policies and Other Information

Instructor: S. S. Ravi
LI 96D, 442-4278
ravi@cs.albany.edu

Office Hours: M 4:30 to 6 PM
W 9:30 to 11 AM

Prerequisite: CSI 333 (Programming at the Hardware-Software Interface) or equivalent with a grade of *at least* C.

Teaching Assistant(s): To be announced.

Required Texts:

1. L. L. Beck, "System Software: An Introduction to Systems Programming", Addison-Wesley, 3rd edition, 1997. (ISBN: 0-201-42300-6).
2. K. Haviland, D. Gray and B. Salama, "Unix System Programming", Addison-Wesley, 1999. (ISBN: 0-201-87758-9).

Recommended Texts:

1. H. M. Deitel and P. J. Deitel, "C How to Program", Seventh Edition, Prentice-Hall, 2014. This was a required text for CSI 333.
2. S. Harbison and G. Steele, "C: A Reference Manual", Fifth Edition, Prentice Hall, Upper Saddle River, NJ, 2002 (ISBN: 0-13-089592X.) This is an extremely useful reference book for programming in C. (It was used as a reference text for CSI 333.) It is highly recommended.

Evaluation:

Midterm	–	March 11, 2014 (T)	:	In class	–	20%
Final	–	May 10, 2014 (Sat)	:	10:30 AM to 12:30 PM	–	30%
Quizzes (best 2 of 3)	–				–	8%
Programming Assignments (5)	–				–	42%

Exams: Details regarding the midterm and final examinations will be announced later. *Missing any of the exams will result in an automatic E grade for the course.*

Quizzes: There are three quizzes and the best two scores out of the three will be used. The dates for the quizzes are given elsewhere in this handout. Each quiz will be given during the last 20 minutes of a class period. Details regarding these quizzes will be announced later. *Students who miss all the three quizzes will receive an automatic E grade for the course.*

Programming Assignments: There will be five programming assignments. These assignments must be done using the machines provided by the Information Technology Services (ITS) unit of the University. (You can log on to these machines remotely.) These assignments must be done using the programming language C. Programming guidelines and submission information appear elsewhere in this handout.

Policy on Cheating:

1. Cheating in an examination or quiz will result in an E grade for the course. Further, the students involved will be referred to the Dean's office for disciplinary action.

2. Programming assignments are meant to be *individual exercises*; you must do these by yourself. (There are *no* team projects.) Cheating in a programming assignment will result in the following penalty *for all the students involved*.

   (a) The programming assignment in which cheating occurred will be assigned a grade of ZERO.

   (b) Further, the highest score among the other programming assignments will be changed to ZERO.

   Students who cheat in two or more programming assignments will receive an automatic E grade for the course. The names of such students will also be forwarded to the Dean's office for disciplinary action.

Makeup Exams: Makeup exams will be given only for valid and verifiable *extenuating* circumstances (e.g. a major medical situation). In such a case, it is the student's responsibility to contact Professor Ravi *ahead of time* and arrange to take a makeup exam at an alternate date/time. Makeup exams will be generally harder than the regular exams.

Policy on I grades: The final drop date with a 'W' grade in the course is **Tuesday, April 8, 2014** for undergraduate students and **Tuesday, March 25, 2014** for graduate students. After this date, a grade of I will be given only for genuine extenuating circumstances that are beyond your control. To be considered for an I grade, both of the following conditions must be met:

1. At the time when you request an I grade, your work must be in good standing. More precisely, (i) you must have an average score of at least 50% in the programming assignments completed up to that point, (ii) your score in the quizzes given up to that point must be at least 50% and (iii) your score in the midterm examination must be at least 50%. (No curving will be used in deciding whether a student meets these conditions.) Therefore, if you miss the midterm or the quizzes or have performed poorly on programming assignments you are *not* eligible for an I grade.

2. Written documentation must be supplied about the extenuating circumstance either by you or by the University administration.

Under no circumstances will the condition for completing an I grade be that the entire course be retaken later without a new registration.

Attendance: Although attendance in lectures is not required, you are strongly advised to attend the lectures. *Some of the material covered in class may not appear on the lecture slides. Students are responsible for all the material covered in lectures.* If you miss a lecture, it is your responsibility to find out the material covered in that lecture. It will *not* be possible for your professor or your TAs to conduct makeup classes.

Other Notes:

1. Course homepage: `www.albany.edu/~csi402`
2. During their office hours, the instructor and the teaching assistants for this class will be glad to help you with the course material and the programs.
3. In addition to the regular office hours, you can also set up an appointment to meet with your instructor and the teaching assistants. Please contact the professor or the TAs at least a day in advance to set up an appointment.

Exam and Quiz Dates:

Exam/Quiz	Date	Time
Quiz I	Feb. 11, 2014 (T)	20 minutes
Midterm	Mar. 11, 2014 (T)	In class (80 min)
Quiz II	Apr. 8, 2014 (T)	20 minutes
Quiz III	May 1, 2014 (Th)	20 minutes
Final	May 10, 2014 (Sat)	10:30 AM to 12:30 PM (120 min)

Additional Information Regarding Programming Assignments

A. General: As mentioned earlier, there will be five programming assignments. The due date and the weightage for each programming assignment will be indicated on the assignment sheet. *Programs won't be accepted after the specified grace period.*

B. Submission information: For each program, you must electronically submit the required file(s) by the deadline. (You should *not* mail the files to Professor Ravi or to any of the TAs.)

At the beginning of each of your source files, you must include (a) your name and (b) your email address in the form of comments. *Failure to do so will result in a penalty of 5% for the programming assignment.*

C. Program grading: For each programming assignment, approximately 85% of the grade will be for correctness and the remaining 15% will be for structure and documentation. *If your program has compilation or linking errors, the grade for the program will be zero.*

To grade your program for correctness, the TAs will prepare a script that will automatically generate an executable version of your program and run the executable on new input data sets prepared by the professor and/or the TAs. Even when your program works correctly on all the sample data sets which were made available, it may fail on the new data sets. *It is your responsibility to prepare additional input data sets and test your program thoroughly before the program is submitted. It is not possible for the professor or the TAs to identify or fix the bugs in the submitted version of your program.*

D. Program documentation: In order for the professor or the TAs to provide any help with your program, you must follow the following documentation guidelines. At the very *minimum*, the documentation for each program must include the following.

(a) Header information (consisting of your name and email address) at the beginning of the program.

(b) An overall description of what the program does along with descriptions of inputs to the program and the outputs produced by the program. Any assumptions that you make with respect to the inputs must be clearly stated.

(c) The purpose of every constant, data type and variable declared in your program must be stated at the point of declaration.

(d) For each function you must provide the following:

  (i) A description of what the function does.

  (ii) Descriptions of all the parameters.

In addition to the above, you must also include in-line comments (i.e., comments interspersed with code) to convey the logic behind your code.