

CSI 333 – Programming at the Hardware-Software Interface – Fall 2009

Course Policies and Other Information

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Office Hours: M 9:30 to 11 AM
Th 2 to 3:30 PM

Prerequisite: CSI 310 (Data Structures) with a grade of at least C.

Teaching Assistants: To be announced.

Required Texts:

1. H. M. Deitel and P. J. Deitel, “C How to Program”, Fifth Edition, Prentice-Hall, 2007. (ISBN: 0-13-240416-8)
2. D. A. Patterson and J. L. Hennessey, “Computer Organization & Design: The Hardware/Software Interface”, Fourth Edition, Elsevier and Morgan Kaufmann Publishers, San Francisco, CA, 2009 (ISBN: 978-0-12-374493-7).
3. J. Waldron, “Introduction to RISC Assembly Language Programming”, Addison-Wesley, 1999 (ISBN: 0-201-39828-1).

Recommended Text: 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 is highly recommended.

Evaluation:

| | | | | | | |
|-----------------------------|---|-------------------|---|--------------------|---|-----|
| Midterm | – | Oct. 13, 2009 (T) | : | In class | – | 20% |
| Final | – | Dec. 14, 2009 (M) | : | 3:30 PM to 5:30 PM | – | 30% |
| Quizzes (2) | – | | | | – | 8% |
| Programming Assignments (5) | – | | | | – | 42% |

Very Important Note: A student must get a grade of at least C in CSI 333 in order to take CSI 402, a required course for all CSI majors. To be considered for a grade of C or better in CSI 333, a student must have an average score of at least 55% in the five programming assignments **and** a weighted overall score (including all exams, quizzes and programming assignments) of at least 55%. No curving will be used in deciding whether a student meets these criteria.

Discussion classes: Each student must be registered for the lecture class (Class No: 27128) and **one** of the discussion classes (Class Nos: 27130, 27132 or 31662). Each discussion class meets once a week and attendance will be taken in each discussion class. *Missing three or more discussion classes during the semester will result in an automatic E grade for the course, regardless of the student’s performance in the course.*

Exams: All of the exams will be *closed book/closed notes*, except that you may be allowed to bring one sheet of 8.5×11 paper containing written material. *Missing either the midterm or the final will result in an automatic E grade for the course, regardless of the student's performance in the other parts of the course.* The final examination will be cumulative. Other details regarding the exams will be announced later.

Quizzes: There will be two equally weighted quizzes which will be given during your discussion classes. The dates for these quizzes are indicated elsewhere in this handout. The duration of each quiz will be about 30 minutes. Students must note the following.

- (a) You must take your quizzes during the discussion class for which you are registered.
- (b) No makeup quizzes will be given.
- (c) *Students who miss both of the quizzes will receive an automatic E grade for the course regardless of their performance in exams and programming assignments.*

Programming Assignments: There will be five programming assignments. These assignments must be done using the Unix machines provided by the Information Technology Services (ITS) unit of the University. (You can log on to these machines remotely.) Note that we *won't* be using the ECL machines for the programming assignments in this course. Some of the programming assignments must be done in C while others are to be done in assembly language. Programming guidelines and submission information appear elsewhere in this handout. *Students whose weighted average score in the programming assignments is less than 40% will receive an automatic E grade for the course regardless of their performance in exams and quizzes.* No curving will be used in deciding whether a student meets this condition.

Policy on Cheating:

1. Cheating in an exam or a quiz will result in an E grade for the course. Further, all the students involved will be referred to the Dean's office for disciplinary action.
2. Programming assignments are meant to be *individual exercises*. Thus, you must do the programming assignments by yourself. Any attempt to obtain partial or full source code for a programming assignment from the Internet will be treated as cheating. 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: A grade of I will only be given for genuine extenuating circumstances that are beyond your control after the final drop date with a 'W' grade (Nov. 5, 2009). 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 a weighted average score of at least 60% on the programming assignments and (ii) you must have an average of at least 60% on the quizzes completed up to that point and (iii) your grade in the first examination must be at least 50%. (No curving will be used in deciding whether a student meets these conditions.) Therefore, if you miss the first exam or have performed poorly on programming assignments or quizzes, you are *not* eligible for an I grade.
2. Written documentation must be supplied either by you or by the University administration about the extenuating circumstances.

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. You are also strongly advised to attend all your discussion classes since material covered in discussion classes will also be included for quizzes and exams. (Recall that *missing three or more* discussion classes results in an *automatic E* grade for the course.) If you miss a lecture or a discussion class, it is your responsibility to find out the material covered in that lecture or discussion class. It will *not* be possible for your professor or your discussion instructor to conduct makeup classes.

Other Notes:

1. 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.
2. In addition to the regular office hours, you can also set up an appointment to meet with your instructor and the teaching assistants. Please call at least a day in advance to set up an appointment.

Schedule of Discussion Classes:

| Class No. | Day and Time | Room | Instructor |
|-----------|---------------------|--------|-----------------|
| 31662 | W 9:20 to 10:15 AM | SL G02 | To be announced |
| 27130 | W 12:35 to 1:30 PM | SL G12 | To be announced |
| 27132 | F 10:25 to 11:20 AM | SL G12 | To be announced |

Quiz Dates:

| Quiz No. | Dates |
|----------|-----------------------------------|
| I | Sep. 23 (W) and Sep. 25 (F), 2009 |
| II | Nov. 6 (F) and Nov. 11(W), 2009 |

Exam Dates:

| Exam | Date | Time |
|---------|-------------------|------------------------------|
| Midterm | Oct. 13, 2009 (T) | In class (80 min) |
| Final | Dec. 14, 2009 (M) | 3:30 PM to 5:30 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 will not be accepted after the deadline.*

B. Submission information: For each program, you must electronically submit the required file(s) by the deadline. The procedure for the electronic submission of your source programs will be explained in your discussion classes. (Please note that you should *not* mail the files to Professor Ravi or to any of the teaching assistants.)

For each program, you must include the following information at the beginning of your source program in the form of comments: (a) your name, (b) the name of your discussion instructor and (c) the call number, day and time of your discussion class. *Failure to do so will result in a penalty of 5% for the programming assignment.*

C. Some documentation guidelines: Programs will be graded for correctness as well as for structure and documentation. The exact division of points between correctness and structure/documentation will be indicated on the assignment sheet. The *minimum* documentation to be included in each program is the following:

- (a) Header information (consisting of your name, etc., as mentioned above) 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. Use the examples in your texts as a guide in documenting your program.