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

CSI 333 has once a week lab classes. Each student must be registered for both the lecture (Class No: 5368) and one of the lab classes (Class Nos: 5369, 5370, 6538 or 7369).

Missing three or more lab classes will result in an automatic E grade for the course.

Quizzes will be given during lab classes.

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 CSI majors pursuing the B.S. degree).
Some Good and Bad Reasons for taking CSI 333

**Good Reasons:**

- You are a Computer Science major and you have met the CSI 310 prerequisite.
- You are a graduate student in Computer Science completing the undergraduate deficiency in CSI 333 and you have met the CSI 310 prerequisite.
- You enjoy writing/debugging programs under Unix and you have met the CSI 310 prerequisite.

**Bad Reasons:**

- You don’t have the CSI 310 prerequisite; however, the course “fits nicely into your schedule”.
- You don’t have the CSI 310 prerequisite; however, you have heard rumors that “the course is very easy”.
Notes About Programming Assignments

Caution

The course is programming-intensive; it is not suitable for students who don’t like programming.

- Programming assignments must be done on the Unix machines supported by ITS.

- Programs will have strict deadlines. (Make it a habit to start working on each programming assignment soon after it is assigned.)

- No credit will be given for programs which have compilation or linking errors.

- Programs must have an adequate level of documentation. (See the handout on “Course Policies” for documentation guidelines.)
Schedule of Lab Classes

<table>
<thead>
<tr>
<th>Class No.</th>
<th>Day &amp; Time</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>5369</td>
<td>W 9:20 to 10:15 AM</td>
<td>Daniel Bokser</td>
</tr>
<tr>
<td>5370</td>
<td>W 4:15 to 5:10 PM</td>
<td>Chris Bouchard</td>
</tr>
<tr>
<td>6538</td>
<td>F 11:30 to 12:25 PM</td>
<td>Daniel Hono</td>
</tr>
<tr>
<td>7369</td>
<td>F 1:40 to 2:35 PM</td>
<td>Angelo Quadara</td>
</tr>
</tbody>
</table>

**Notes:** All lab classes are in HU B25. Lab classes begin from Wednesday, Aug. 28, 2013.

**Class homepage:** [www.albany.edu/~csi333](http://www.albany.edu/~csi333)
Topics Assumed

- Good knowledge of Java (or C++) and basic data structures (e.g. declarations, arithmetic and control statements, modularity, arrays, linked lists, recursion, sorting and searching algorithms).

- Ability to understand algorithms written using a notation similar to Java (or C++).
Prerequisite Quiz

- **Date and Time:** During the last 20 minutes of the class on Thursday, Aug. 29, 2013.

- A quiz to test your understanding of very basic material from your Data Structures class (CSI 310 at UAlbany).

- Be prepared to write short program segments. You can use Java, C++ or C depending on your background.

- People whose performance is not satisfactory will be asked to strengthen their background in Data Structures.

- The grade in this quiz **won’t** be used in deciding the course grade for CSI 333.
Topics to be Covered (outline)

- Number systems.
- Introduction to Unix.
- Features of C useful in systems programming. (Roughly speaking, C is a subset of Java (or C++).)
- Command line arguments in Unix.
- Assembly language programming (using MIPS Assembly Language) emphasizing a programmer’s view of a computer system.
- Implementation of some data structures in MIPS Assembly Language.
Suggestions

- Skim the lecture slides and the handouts before each lecture.
- Bring a copy of lecture slides and handouts to class.
- After each lecture
  - study the lecture slides, the relevant material from the texts & the handouts carefully and
  - do the exercises suggested in the lecture slides.