CMPS 12B/M
Introduction to Data Structures
Summer 2013 (June 24 – August 16)

Description: Teaches students to implement common data structures and the algorithms associated with each data structure, through progressively difficult exercises. Topics include big “O” notation; pointers, recursion (induction), and dynamic allocation; linked lists and list processing; stacks, queues, binary trees and binary search trees; simple sorting techniques and simple search techniques. Students will gain a working knowledge of the elements of the Java and C programming languages. Prior experience with Unix is assumed.

Prerequisites: CMPS 11 or 12A or CMPE 13. Concurrent enrollment in CMPS 12M is required.

Time and Place: TTh 10:00 – 12:45 E2 194
Class Webpage: http://ic.ucsc.edu/~ptantalo/cmps12b/Summer13/

Instructor: Patrick Tantalo http://users.soe.ucsc.edu/~ptantalo/
Office: E2 257
Office Hours: M 3:30-4:30, TTh 2:00-4:00, or by appointment
Email: ptantalo@soe.ucsc.edu
Phone: 831-459-3898

Teaching Assistant: Jamal Roache (hroache@ucsc.edu)
Lab Sections: TTh 1:30-3:30 Social Sciences I PC lab (Room 135)

LSS Tutor: Jacob Defilippis (jpdefili@ucsc.edu)


Supplementary Texts:

Coursework and Evaluation for CMPS 12B:
We will have five Programming Assignments due at roughly 10 day intervals. Midterm Exam 1 will be held Thursday July 11 and Midterm Exam 2 will be held Thursday August 1. The Final Exam will be held on Thursday August 15, 10:00 – 1:00. Please make arrangements now to be available at these times. Coursework for 12B will be weighted as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Programming Assignments</td>
<td>60%</td>
</tr>
<tr>
<td>Midterm Exam 1</td>
<td>10%</td>
</tr>
<tr>
<td>Midterm Exam 2</td>
<td>10%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>20%</td>
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Coursework and Evaluation for CMPS 12M:
We will have 7 Lab Assignments due at roughly one week intervals dealing with topics such as: makefiles, executable jar files, command line arguments, file input and output, introduction to C, data abstraction and information hiding in C, and gui programs in Java. Some of these assignments will build
on the 12B programming assignments. The 12B **Final Exam** will also figure in the grade for 12M. Coursework for 12M will be weighted as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Lab Assignments</td>
<td>80%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>20%</td>
</tr>
</tbody>
</table>

The grading scale for both 12B and 12M will be approximately: A+: 97%-100%, A: 93%-96%, A-: 90%-92%, B+: 87%-89%, B: 83%-86%, B-: 80%-82%, C+: 76%-79%, C: 70%-75%, D: 60%-69%, F: 0%-59%. Letter grade boundaries may be lowered at my discretion in order to eliminate some borderline cases.

**Accommodations for Students with Disabilities**
If you qualify for classroom accommodations because of a disability, please submit your Accommodation Authorization Letter from the Disability Resource Center (DRC) to me during my office hours or by appointment, preferably within the first week of the Summer Session. Contact DRC by phone at 831-459-2089 or drc@ucsc.edu for more information.

**Academic Honesty:**
The Baskin School of Engineering has a zero tolerance policy for any incident of academic dishonesty. If cheating occurs, consequences may range from getting zero on a particular assignment to failing the course. In addition every case of academic dishonesty is referred to the students’ college Provost who sets in motion an official disciplinary process. Cheating in any part of the course may lead to failing the course, suspension or dismissal from the Baskin School of Engineering, or from UCSC.

What is cheating? In short, it is presenting someone else’s work as your own. Examples would include copying another students’ lab or programming assignment, or allowing your own work to be copied. You may discuss programs with fellow students, but your collaboration must be at the level of ideas only. You may freely give and receive help with the computer facilities, editors, the UNIX operating system, and the proper use and syntax of the C and Java programming languages; but you may not copy, paste, email, transfer or in any way share source code. If you do collaborate (legitimately) or receive help from anyone, you must credit them by placing their name(s) at the top of your program. Please go to http://www.ucsc.edu/academics/academic_integrity/ to see the full text of the University's policy on Academic Integrity.