COMP 182/L – Data Structures and Program Design / Lab – Fall 2014

Professor: Dr. Vahab Pournaghshband (e-mail: vahab@csun.edu)
Course Webpage: http://lasr.cs.ucla.edu/vahab/comp182
Lectures: JD 3510 - TTh 2:00-3:15PM
Labs: JD 2214 - TTh 3:30-4:45PM
Office Hours: JD 1104 - MW 5:00-6:45PM
Textbook: Data Abstraction & Problem Solving with JAVA - Carrano & Pritchard

Course Objectives: Understanding data structures and their role in the larger area of software development. Structures covered include arrays, vectors, linked lists, stacks, queues, hash tables, and trees. Sorting and searching techniques will also be studied. The course also introduces the analysis techniques necessary to understand the impact the choice of structure has on execution time and storage space. Various Java programming items are covered as needed to support programming projects.

Tentative Schedule:

Tuesday			Thursday		
Aug 26	Syllabus/Overview		Aug 28	Prereq	
Sep 2	Prereq		Sep 4	Vectors	P1
Sep 9	Ordered Vectors		Sep 11	Linked Lists	
Sep 16	LL Variants		Sep 18	Recursion	
Sep 23	Java Items		Sep 25	Review	LE1
Sep 30	Midterm 1	P2	Oct 2	Algorithm Efficiency	
Oct 7	Stacks/Queues		Oct 9	Priority Queues	
Oct 14	Recursion		Oct 16	Java Items	
Oct 21	Sorting		Oct 23	Sorting	P3
Oct 28	Sorting		Oct 30	Review	LE2
Nov 4	Midterm 2		Nov 6	Recursion	
Nov 11	Trees		Nov 13	Binary Search Trees	
Nov 18	Binary Search Trees	P4	Nov 20	Heaps	
Nov 25	Heap Sort		Nov 27	ACM - Ethics	
Dec 2	Hash Tables		Dec 4	Hash Tables	LE3
Dec 9	Review		Dec 11	Final 3:00-5:00	P5

Grading: You will get the same letter grade for the class and the lab (Plus/Minus grading will be used). If you fail 2 or more of the lab exams, your grade will be an F regardless of your performance on any other item. If you pass 2 or more of the lab exams then you will be graded based upon 2 midterms, 3 lab exams, approximately 6 programming projects, and a final. Your scores on these items will be combined into an overall percentage by weighting the items: midterms = 30%, lab exams = 15%, projects = 25%, final = 25%, scribe notes = 5%. Your combined percentage can be converted to a letter grade using the table below. Required percentages may be slightly reduced at the instructors discretion. You must take the final exam at the designated time.

Assignments. The assignments (homeworks and programming projects) will be posted on the course webpage along with their due dates. They will be submitted also via the course webpage. Late submissions will NOT

A	92%	A-	90%	B+	88%	B	82%	B-	80%	C+	78%
C	72%	C-	70%	D+	68%	D	62%	D-	60%	F	0%

be accepted and will receive no credit. Your assignment MUST follow the guidelines specified in the general project requirements section on the course webpage.

Course Webpage. The URL for the course website is http://lasr.cs.ucla.edu/vahab/comp182. You must check the site for announcements at least once every other weekday. Important announcements will be announced in the lecture and posted on the course webpage. The credentials (username and password) to access the password protected sections of the webpage will be announced in the first class. You may ask the professor for this information as well.

Academic Dishonesty: The typical penalty for any form of academic dishonesty is an F for the course and being reported to the Vice President for Student Affairs. Note that facilitating the academic dishonesty of others is a form of academic dishonesty. All projects and exams in this course are individual (not groups). For projects, students may have discussions, explain to each other what needs to be done, and suggest strategies to accomplish tasks, but should under no circumstances share or copy source code. What you submit should reflect your ability to program. For exams, students should be working individually without any external help. Further details about academic dishonesty can be found in Appendix E of the CSUN catalog (www.csun.edu/catalog). If there is any doubt as to what constitutes academic dishonesty ask the professor.

Changes to Syllabus. Changes may be needed to this syllabus and to the course plan. All such changes will be announced in class and posted on the class web site. Students are responsible for this information.