

DVC Student Learning Outcomes

Diablo Valley College Instructional SLOs	Course No/Title	COMSC-210: Program Design and Data Structures		Assessment Yr/Term	2008 FA	
	Contact Person	Robert Burns	Ext	2610	Assessment Cycle#	
Course Goal Statement	The purpose of this course is teach techniques relevant to program design and selection of data structures for larger programs. Topics covered include design techniques, effective use of recursion, algorithmic efficiency and O-notation, linked lists, binary trees, B-trees, graphs, sorting and searching techniques. Extensive programming of a variety of data structures is required.				Cycle Completed	No
Edited: 1/29/2009					Stages 1-3 Completed	No
					Stages 4-5 Completed	No

#	1. Expected Outcome	2. Assessment Methods	3. Measurement Criteria	4. Data Analysis	5. Action Plan
1	Students completing the course will be able to create C++ templates for custom data structures, with the standard operations of insert, replace, retrieve, and remove.	Online self-evaluation survey question by email invitation during finals week, for all students on the active WebAdvisor roster, using the email addresses from WebAdvisor profiles.	Whether they answered "Strongly agree", "Somewhat agree", "Neutral", "Somewhat disagree", or "Strongly disagree", and associated comments.	10 Strongly agree 91% 1 Somewhat agree 9% 0 Neutral 0% 0 Somewhat disagree 0% 0 Strongly disagree 0% 100% agree	Affirmation and reinforcement of current methods and curriculum.
2	Students completing the course will be able to understand the differences among the various search techniques (linear, binary, and binary trees) and can implement all of them.	Online self-evaluation survey question by email invitation during finals week, for all students on the active WebAdvisor roster, using the email addresses from WebAdvisor profiles.	Whether they answered "Strongly agree", "Somewhat agree", "Neutral", "Somewhat disagree", or "Strongly disagree", and associated comments.	9 Strongly agree 82% 2 Somewhat agree 18% 0 Neutral 0% 0 Somewhat disagree 0% 0 Strongly disagree 0% 100% agree	Affirmation and reinforcement of current methods and curriculum.
-3	Students completing the course will be able to understand the difference among various $O(n \lg n)$ sorting algorithms and can implement quick sort, merge sort, Shell sort, and heap sort	Online self-evaluation survey question by email invitation during finals week, for all students on the active WebAdvisor roster, using the email addresses from WebAdvisor profiles.	Whether they answered "Strongly agree", "Somewhat agree", "Neutral", "Somewhat disagree", or "Strongly disagree", and associated comments.	8 Strongly agree 73% 3 Somewhat agree 27% 0 Neutral 0% 0 Somewhat disagree 0% 0 Strongly disagree 0% 100% agree	Affirmation and reinforcement of current methods and curriculum.