COURSE SLO ASSESSMENT REPORT, SCC

Department: Mathematics Course: 170—Pre-Calculus

Year: ___2011_____ Semester:___Spring/Summer_____

1) Outcome to be assessed	2) Means of assessment and criteria of success	3) Summary of data collected	4) Analysis of data	5) Plan of action/what to do next
1. State and Apply basic definitions, properties and theorems of Pre-Calculus 2. Solve higher order polynomial equations, rational inequalities and equations, systems of inequalities and equations and more complex trigonometric, exponential and logarithmic equations 3. Analyze and graph functions, systems of inequalities and conics, using technology where appropriate	Students were given a 2.5 hour final exam with 22 questions. Three questions were selected for assessment, each question addressing a different SLO. All 3 questions involved trigonometric functions. The questions were viewed as correct or wrong. Correct means completely correct except for at most a minor computational error. Otherwise, wrong. Information from four course sections, three in spring and one in summer were assessed.	84 exams were evaluated. The question that addressed SLO 1 had an overall percent correct of 69%. This was up from 61% in spring. The individual class scores varied from 22% to 94%. The question that addressed SLO 2 had 61% correct, up from 47.1% correct in fall. The individual class scores varied from 27% to 78%. The question that addressed SLO 3 had 61% correct, down from 68.6% correct in fall. The individual class scores varied from 54% to 89%. A table comparing grades in class to scores on the final exam is also attached.	The results were very instructor dependent. The overall percents of success were good. It was nice to see the improvement in the question addressing SLO #2. The two strongest classes were the summer class and the evening class. Some of the questions on the final were asked slightly differently than in the book. For example, instead of being asked to graph functions, students were given graphs and asked to write a possible equation for the function. The thought was that this would keep students from just plugging into the calculators.	We need to continue our departmental discussion on final exams, in general. We don't want instructors to teach to the final, but the final should represent what we want students to know at the end of the course. We want something that students should do well on independent of which instructor they had. We need to discuss how closely final exam questions should mirror homework questions. Perhaps we should embed questions on exams instead of having a departmental final. These issues will be brought up at a department meeting.

	Instructor x		Instructor y		Instructor z		Instructor w		OVERALL		OVERALL IN FALL	
Problem	correct	%	correct	%	correct	%	correct	%	correct	%	correct	%
#3 (old#4)	32	86%	4	22%	5	45%	17	94%	58	69%	43	61%
#8(old#12)	29	78%	11	61%	3	27%	12	67%	55	65%	33	47%
#13(old#17)	20	54%	10	56%	8	73%	16	89%	54	61%	48	69%
students	37		18		11		18		84		70	

#3 Finding the value of one trigonometric function given the value of another (SLO 1)
#8 Solving a trigonometric equation (SLO 2)
#13 Graphing a trigonometric function with a period change and a phase shift (SLO 3)

Comparison of grade in class to score on the final

	A	B	C	D	F
98-99	w				
96-97	x				
94-95	xxzw				
92-93					
90-91	yy				
88-89			w		
86-87		w	w		
84-85			y		
82-83	xx	xxxw	w		
80-81	x	xxzz	w		
78-79		xy		x	
76-77		x	w	x	
74-75		xxyw	ww		
72-73			w		
70-71		xxy	yy	ww	
68-69	yy	y		w	
66-67			x		
64-65			x	xxw	
62-63			yyz	z	
60-61		x	xx	yw	
58-59					
56-57			xxyz		
54-55			x		
52-53			z		
50-51					
48-49				xy	
46-47			xz	x	z
44-45			y		
42-43					x
40-41					
0-39				xyy	xxxz

MATH 170 SLOs

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