Assessment for MATH 1316, Trigonometry, Spring 2009

Evaluate:
A  EEO #2: To present and evaluate basic mathematical information verbally, numerically, graphically, and symbolically.
EEO #5: To interpret mathematical models such as formulas, graphs, tables, and schematics, and draw inferences from them.
B. Course Learning Objectives: The questions given to you are measuring the following Course Learning Objectives:

# 2. Graph all six trigonometric functions and their transformations.
# 4. Solve trigonometric equations.

Standard: The MATH 1316 Committee expects that the average score of all students completing the Trigonometry course will be 75% or higher on each individual question. If lower, that will indicate that the committee will need to improve our instruction/emphasis of those concepts in future semesters so that student success improves.

Instructions: It is suggested that instructors use the two questions attached or use them as samples to write your own question. If you write your own questions they should be of approximately the same level of difficulty and involve similar reasoning. The questions may be given on a quiz, a test or the final exam. They should be given during the last four weeks of the semester. The score on this assessment is not required as part of the final grade for the student.

For the core curriculum assessment purpose, you will need to grade each problem on a 4- point scale:

Problem # 1 4 – completely correct  
3 – one of the general solutions is missing  
2 – two of the general solutions are missing  
1 – use of trigonometric identity is correct and the factoring is correct, everything else incorrect  
0 – completely incorrect  

Problem # 2 4 – completely correct  
3 – three of amplitude, vertical shift, phase displacement and period are correct, everything else incorrect  
2 – two of amplitude, vertical shift, phase displacement and period are correct, everything else incorrect  
1 – one of amplitude, vertical shift, phase displacement and period, is correct everything else incorrect  
0 – completely incorrect  

Problem # 3 4 - both parts correct, 2 - one part correct , 0 - completely incorrect
How you score the items for your own grading scheme is, of course, up to you. You can use your own judgment on how the scores will be used or not used to calculate the course grades.

You will report 2 scores for each student who completes the course, one score for each question. In addition, list the EEO and course learning objectives that your question covers next to the question. A sample report appears below. Note that the EEO objectives are from the EEO grid and the Trig objectives are from the course learning objective list.

<table>
<thead>
<tr>
<th>Student number</th>
<th>Q #1 (E2 T4)</th>
<th>Q #2 (E5 T2)</th>
<th>Q #3 (E5 T2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>4</td>
<td>4</td>
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<tr>
<td>2</td>
<td>4</td>
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<td>3</td>
<td>4</td>
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<td>2</td>
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</tbody>
</table>

The committee does not think that we should include scores for students who stopped coming but did not drop the class. While that student will receive a final course grade, their grade in no way reflects whether the course is doing what it should. This reporting information should be submitted directly to Gill Waterston at Pinnacle. The sheet should not identify the instructor nor individual students. But we do need to know which instructors have submitted the information.

Keep in mind that we are not assessing individual instructors or individual students, but we do need to assess in general if the course is “doing what it should be doing”.

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