ABET OUTCOMES

مخرجات ابت الخاصة بالحقيبة التدريسية للمواد النظرية

إعداد

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OUTCOME '' K ''AN ABILITY TO USE THE TECHNIQUES, SKILLS AND MODERN ENGINEERING TOOLS NECESSARY FOR ENGINEERING PRACTICE''

- **Performance Indicators:**

- 1.   Successfully demonstrated use of modern computer based tools and techniques for design and analysis appropriate to the discipline

- إثبات نجاح استخدام أدوات وتقنيات الكمبيوتر الحديثة للتصميم والتحليل المناسب للانضباط

- 2.   Successfully demonstrated use of modern data acquisition and data reduction tools in a laboratory setting appropriate to the discipline

- إثبات نجاح استخدام البيانات الحديثة والحصول عليها وأدوات الحد من البيانات في المختبر للإعداد المناسب للانضباط

- Assessment tools (Students Work)

SCORING RUBRIC "A SCORING GUIDE USED TO EVALUATE THE QUALITY OF STUDENTS' CONSTRUCTED RESPONSES"

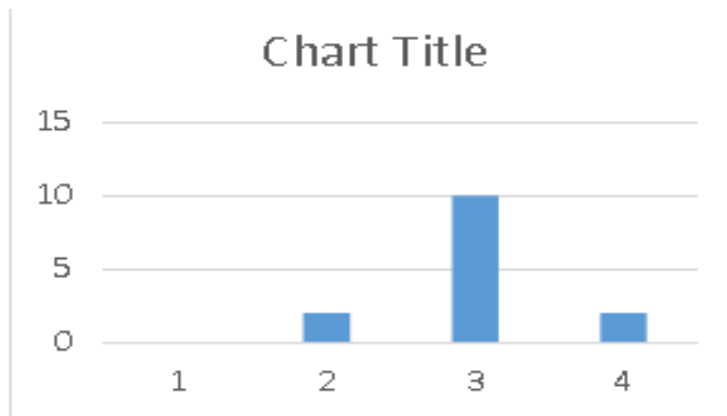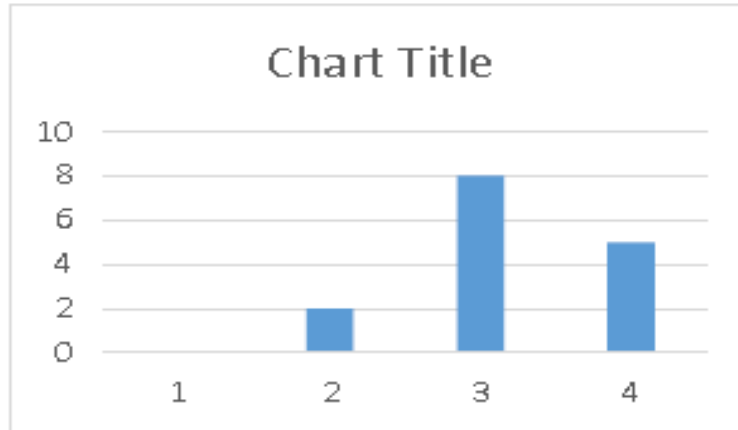|	4- Exceeds	3- Meets	2-Progressing	1-Below
Used modern computer based tools and techniques	Demonstrated the use of multiple tools routinely in projects, homework outside of the class in which they were taught. Specifically used during the culminating design experience	Demonstrated the use of more than two tools and have used them for projects outside of the class in which they were taught	Demonstrated the use of more than one tool, but only in the classes in which they were taught	Only demonstrated the use of one tool and then only in the class in which it was taught
Used modern data acquisition and data reduction tools	Used modern data acquisition tools in a lab class and subsequently for an independent student project	Used modern data acquisition tools in a lab class and had to set them up for use in a independent experiment	Used modern data acquisition tools, but did not have to set them up for a particular experiment.	Never used modern data acquisition tools in the laboratory.

EXAMPLE

- Assume we have 14 students.

- Any class using modern technology say CAD

- Now a simple gob or home work must evaluated according to performance indicator by ½ of degree points for each one.

- So according to Rubric table let us assume the students groups indicators were as follow:

	4- Exceeds	3- Meets	2-Progressing	1-Below	
Three significant contemporary issues	||||| |	||||	|||	|	6*4+4*3+3*2+1*1=43, 43 / 14 = 3.071
Citing arguments	||||| |	||||	|||	|	6*4+4*3+3*2+1*1=43, 43 / 14 = 3.071

- Average = (3.071+3.071) / 2 = 3.071

- So the final grad for outcomes K = 3.071/4

PERFORMANCE INDICATOR CHARTS RESULT

- **Students Works Rating:**

- Lecturer should also made a students works rating which is a number of 1~ 4 of their understanding for the performance indicator.

- Then calculating the Average (x of 4) and final grade (x/4)

- It's related to lecturer to do students works rating chart and it should loke like the performance indicator one.

- SD " Standard deviation is needed for both. Hint/ you could use the web to do it easily. Also it is good if less than 1

STUDENT AND FACULTY EVALUATIONS OF LEARNING OUTCOMES

Students Outcomes	Students Rating	SD	Instructor Rating	SD	Instructor Comments
K	Assume 3.119	0.687	3.071	0.265	Acceptable difference
Assessment of Changes/Improvements Made this year, 2016/2017	No improvement is made				
Changes/Improvements That Will Be Made Next Time the Course is Offered	We hope that next year will be improved by:				