ABET OUTCOMES مخرجات ابت الخاصة بالحقيبة التدريسية للمواد النظرية إعداد د. أحمد عدنان عبد الجبار مدير شعبة الجودة / قسم الهندسة الميكانيكية

## OUTCOME " J "A KNOWLEDGE OF CONTEMPORARY ISSUES" معرفة القضايا المعاصرة

- Performance Indicators:
- 1. Can identify at least three significant contemporary issues containing an engineering component as part of its resolution

يمكنه تحديد ما لا يقل عن ثلاث قضايا معاصرة كبيرة تحتوي على عنصر الهندسة كجزء من قرارها •

- 2. Can explain why the identified issues are dilemmas by citing the main arguments on either side
- يمكنه أن يفسر سبب كون القضايا المحددة هي المعضلات من خلال الاستشهاد بالحجج الرئيسية على أي من الطرفين
- Assessment tools (Interview)

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

		4- Exceeds	3- Meets	2-Progressing	1-Below
	Three significant	Can identify more	Can identify three	Can only identify two	Can only identify one
ò		,	contemporary issues	contemporary issues	contemporary issue or none
	Citing arguments	•	Can adequately describe arguments for most, but not all of the issues identified.	Can adequately describe arguments for one of the issues identified	Can not describe arguments and has trouble articulating why identified issues are dilemmas

#### Questionnaire for outcome (J)

Performance Indicator 1	Identify at least three significant issues that will at least partially involve engineering solutions facing society in the next 50 years			
Performance	Briefly describe the arguments for both sides of the issues you have identified that			
Indicator 2	makes them a dilemma			
	Is the solution purely engineering/technology driven? If not what other disciplines are			
	required to resolve the issues.			

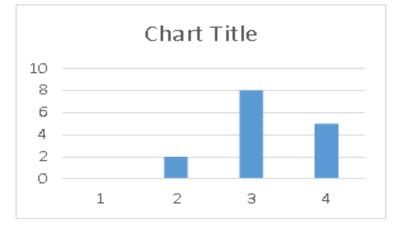
### EXAMPLE

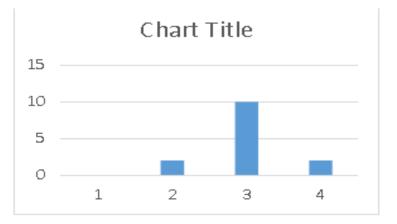
- Assume we have 14 students.
- Any class say Human Rights
- Now a simple gob or home work must evaluated according to performance indicator by 1/2 of degree points for each one.
- So according to Rubric table let us assume the students groups indicators were as follow:

	4- Exceeds	3- Meets	2-Progressing	1-Below	
Three significant					6*4+4*3+3*2+1*1=43,
contemporary					43 / 14 = 3.071
issues					
Citing arguments		1111			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 J = 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
J	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/Improve Next Time the		We hope that next year will be improved by:			