

ABET OUTCOMES

مخرجات ابت الخاصة بالحقية التدريسية للمواد النظرية

إعداد

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OUTCOME “ F “AN UNDERSTANDING OF PROFESSIONAL AND ETHICAL RESPONSIBILITY”

- **Performance Indicators:**

- **1. Understands intellectual property types and their importance**

- تفهم أنواع الملكية الفكرية وأهميتها

- **2. Understands consequences of poor work quality**

- تفهم عواقب قلة جودة العمل

- **3. Understands consequences of unethical behavior**

- تفهم عواقب التصرفات الغير أخلاقية

- **4. Understands what to do if others exhibit unethical behavior**

- فهم ما يتوجب عليهم القيام به تجاه من يقومون بتصرفات ضد اخلاقيات المهنة

- **Assessment tools (Student work, Interview, Student work with Interview)**

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

	4- Exceeds	3- Meets	2-Progressing	1-Below
1. Intellectual property importance	Can name types of intellectual property and describe their importance	Can describe some of the types but describes why IP is important	Describes what IP is generally but can not differentiate the types. Has difficulty explaining why IP is important	Does not know what IP is or can not explain its importance
2. Consequences of poor work quality	Understands the potential consequences of poor work and can give recent, real examples.	Understands the potential consequences of poor work	Can describe some consequences of poor work	Can not describe potential consequences of poor work other than in the context of career or personal advancement.
3. Consequences of unethical behavior	Understands the potential consequences of unethical behavior and can give recent, real examples.	Understands the potential consequences of unethical behavior	Can describe some consequences of unethical behavior	Can not describe potential consequences of unethical behavior other than in the context of being in trouble if found out
4. Actions to take if others exhibit unethical behavior	Can describe specifically who to speak to in the work place when a suspected unethical behavior is exhibited by others	Can describe some steps to take when confronted by others exhibiting unethical behavior	Can describe only one step to take when confronted by others exhibiting unethical behavior	Does not know what to do when confronted by someone else exhibiting unethical behavior

QUESTIONNAIRE FOR OUTCOME (F)

Performance Indicator 1	What is intellectual property? ماهي حقوق الملكية الفكرية?
	هل يمكنك ان تسمي أنواع الملكية الفكرية?
	Why is intellectual property important? ماهي أهمية الحقوق الملكية الفكرية?
Performance Indicator 2	What are potential consequences of turning out poor work? ما هي العواقب التي تترتب على ضعف اخلاقيات المهنة
	What are some recent real world examples of poor engineering or workmanship having extremely adverse effects. ماهي الأمثلة الحديثة في مجال الهندسة التي تنجم عن ضعف اخلاقيات المهنة
Performance Indicator 3	Describe how unethical behavior of engineers can be problematic for the public. وصف عواقب انعدام او قلة اخلاقيات المهنة وانعكاساتها على المجتمع
	Give some examples of unethical behavior has had a catastrophic impact. اعطاء امثلة على تصرفات غير أخلاقية بالمهنة أدت إلى كوارث وعواقب وخيمة
Performance Indicator 4	If you become aware of unethical behavior by an employee, what do you do? ما الذي يتوجب عليك القيام به تجاه من يخلفون اخلاقيات المهنة

THE FUNDAMENTAL CANONS OF ASME (ETHICS CODE)

- 1. Engineers shall hold paramount the safety, health and welfare of the public in the performance of their professional duties.
- 2. Engineers shall perform services only in the areas of their competence; they shall build their professional reputation on the merit of their services and shall not compete unfairly with others.
- 3. Engineers shall continue their professional development throughout their careers and shall provide opportunities for the professional and ethical development of those engineers under their supervision.
- 4. Engineers shall act in professional matters for each employer or client as faithful agents or trustees, and shall avoid conflicts of interest or the appearance of conflicts of interest.
- 5. Engineers shall respect the proprietary information and intellectual property rights of others, including charitable organizations and professional societies in the engineering field.
- 6. Engineers shall associate only with reputable persons or organizations.
- 7. Engineers shall issue public statements only in an objective and truthful manner and shall avoid any conduct which brings discredit upon the profession.
- 8. Engineers shall consider environmental impact and sustainable development in the performance of their professional duties.
- 9. Engineers shall not seek ethical sanction against another engineer unless there is good reason to do so under the relevant codes, policies and procedures governing that engineer's ethical conduct.
- 10. Engineers who are members of the Society shall endeavor to abide by the Constitution, By-Laws and Policies of the Society, and they shall disclose knowledge of any matter involving another member's alleged violation of this Code of Ethics or the Society's Conflicts of Interest Policy in a prompt, complete and truthful manner to the chair of the Ethics Committee.

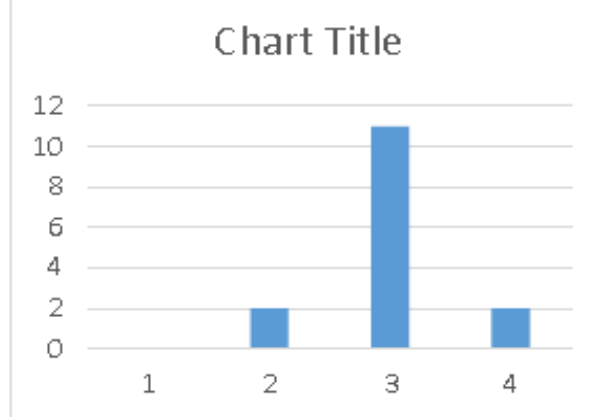
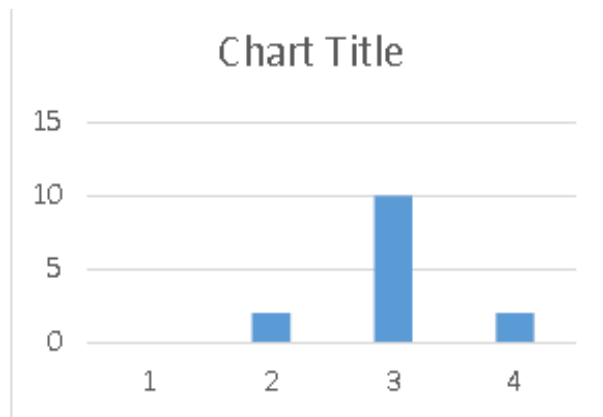
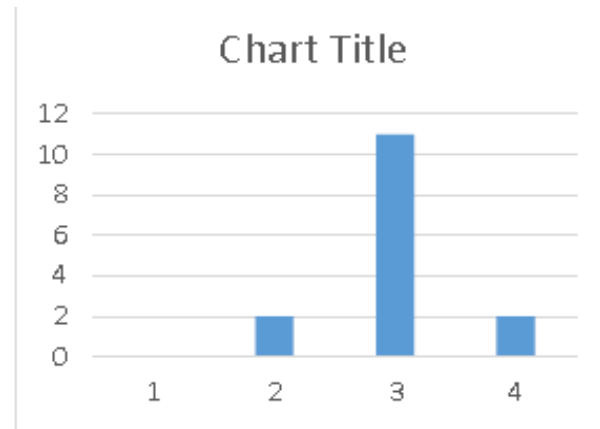
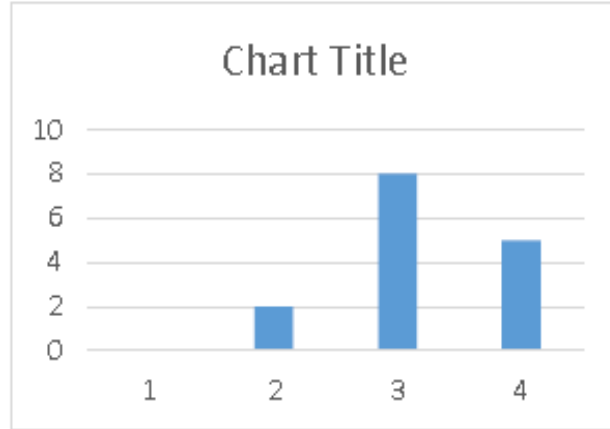
EXAMPLE

- Assume we have 11 students.
- Any class say Manufacturing Processing
- Now the lecturer give his students an example of un ethical behavior and the lecturer must evaluate according to performance indicator by $\frac{1}{4}$ of degree points for each one or by any ratio he/she use.
- So according to Rubric table let us assume the students rating indicators were as follow:

	4- Exceeds	3- Meets	2-Progressing	1-Below	Average
Intellectual property importance					$11*3=33$, $ave=33/3=3$
Consequences of poor work quality					$1*4+6*3+4*2=30$, $ave=30/11=2.727$
Consequences of unethical behavior					$1*4+5*3+5*2=29$, $ave=29/11=2.636$
Actions to take if others exhibit unethical behavior					$2*4+9*3=35$, $ave=35/11=3.182$

- Total average = $(3 + 2.727 + 2.636 + 3.182) / 4 = 2.886$
- So the final grad for outcomes F = $2.886/4$

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
F	Assume 2.922	0.92	2.886	0.250	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:		