

CEE 9510 Assignment 1 Answer Key



Enough information is provided to the student for them to make a reasonable recommendation regarding which projects more likely satisfy the UWO must haves and wants criteria. Notably only project 4 is possibly sketchy enough to consider cutting for consideration outright. If the student decides to base their decision entirely on information that is presented or very easily inferred, then a response as below is the outcome. In this scenario it is very clear which project is the most and which is the least beneficial for the university, with all others still perhaps requiring debate or further study. The student was never specifically instructed as to whether all wants had to have a value applied to them. If the student were to take the next step and try to decide without additional information what the ranking order should be, they run the risk of making false assumptions where information might be readily available with further investigation. As such the right answer for full marks will reflect only applying known values in the want objectives columns and determining correctly projects 1 and 7. Full marks will be given for a response that applies subjective values to unknown or unclear cells as long as the correct answers as shown below are maintained. If the subjective "noise" introduced by the student changes the correct response, then the student will receive only part marks, despite their possibly having all the correct non-subjective cells filled in with correct answers. This is of course because the student has acted upon information they do not truly have when all that would have been necessary to truly know would have been to ask - always a risky and unadvisable strategy for a decision maker. If the student demonstrates a willingness to ask for additional information in their response but still charges ahead and fills in information they do not know, then of course they will receive part marks at best as well. Finally, if the student actually finds project 3 to be the lowest priority, once again full marks will be considered. In reality, the student should have stopped and performed further analysis to see which of project 2 and project 3 appear to be the most definitively low. This analysis I expect would have uncovered project 2 as the real risk, but I will allow some variability in opinion there such that project 3 will also be taken as an acceptable answer. For full marks, the student will have what is circled in red. The marker will also focus on what is circled in blue.

Must Objectives		Must Meet if Impacts	1	2	3	4	5	6	7
All projects meets current legal, safety, and environmental standards		y=yes, n=no, N/A	yes	yes	yes	investigate	yes	yes	yes
All projects must be consistent with in some way adding to the body of knowledge at UWO.		y=yes, n=no, N/A	yes	yes	yes	investigate	yes	yes	yes
All projects should not have an adverse effect on current or planned operations within UWO.		y=yes, n=no, N/A	yes	yes	yes	investigate	yes	yes	yes
Want Objectives	Relative Importance 1-100	Single Project Impact Definitions	Weighted Score	Weighted Score	Weighted Score	Weighted Score	Weighted Score	Weighted Score	Weighted Score
Top 10 MacLeans poll	80	0 = no potential = Low Potential High Potential 1 2 =			2	0 or 1 or 2	2		0 or 1 or 2
NRC Matching funds	75	0 = no potential = Low Potential High Potential 1 2 =	2			2	2		0
Commercial activity at Stiller Center	40	0 = no potential = Low Potential High Potential 1 2 =					2		0
Raises Environmental consciousness	50	0 = no potential = Low Potential High Potential 1 2 =	1 or 2			2	0 or 1 or 2	0 or 1 or 2	2
Does not apply pressure to increase tuition	60	0 = no potential = Low Potential High Potential 1 2 =	2	2	0	1	2	2	0
Enhances UWO reputation for innovation	55	0 = no potential = Low Potential High Potential 1 2 =			2	2	2	0 or 1 or 2	0 or 1 or 2
Provides basis for new faculty at UWO	15	0 = no potential = Low Potential High Potential 1 2 =		0 or 1			2		2
Generates 14% ROI	70	0 = no potential = Low Potential High Potential 1 2 =	2	1	0 or 1	0	1 or 2	1 or 2	0 or 1 or 2
Is mission critical or less than \$1million capital expenditure	80	0 = no potential = Low Potential High Potential 1 2 =	2	2		0	2	2	2
Total Weighted Score			620 to 670	270 to 285	270 to 340	480 to 640	880 to 1050	350 to 730	290 to 700
Priority				Lowest			Top		

Alternative acceptable "You got Lucky" response 1.

Must Objectives		Must Meet if impacts	1	2	3	4	5	6	7
All projects meets current legal, safety, and environmental standards		y=yes, n=no, N/A	yes	yes	yes	investigate	yes	yes	yes
All projects must be consistent with in some way adding to the body of knowledge at UWO.		y=yes, n=no, N/A	yes	yes	yes	investigate	yes	yes	yes
All projects should not have an adverse effect on current or planned operations within UWO.		y=yes, n=no, N/A	yes	yes	yes	investigate	yes	yes	yes
Want Objectives	Relative Importance 1-100	Single Project Impact Definitions	Weighted Score	Weighted Score	Weighted Score	Weighted Score	Weighted Score	Weighted Score	Weighted Score
Top 10 MacLeans poll	80	0 = no potential = Low Potential High Potential 1 2 =	subjective	subjective	2	0 or 1 or 2	2	subjective	0 or 1 or 2
NRC Matching funds	75	0 = no potential = Low Potential High Potential 1 2 =	2	subjective	subjective	2	2	subjective	0
Commercial activity at Stiller Center	40	0 = no potential = Low Potential High Potential 1 2 =	subjective	subjective	subjective	subjective	2	subjective	0
Raises Environmental consciousness	50	0 = no potential = Low Potential High Potential 1 2 =	1 or 2	subjective	subjective	2	0 or 1 or 2	0 or 1 or 2	2
Does not apply pressure to increase tuition	60	0 = no potential = Low Potential High Potential 1 2 =	2	2	0	1	2	2	0
Enhances UWO reputation for innovation	55	0 = no potential = Low Potential High Potential 1 2 =	subjective	subjective	2	2	2	0 or 1 or 2	0 or 1 or 2
Provides basis for new faculty at UWO	15	0 = no potential = Low Potential High Potential 1 2 =	subjective	0 or 1	subjective	subjective	2	subjective	2
Generates 14% ROI	70	0 = no potential = Low Potential High Potential 1 2 =	2	1	0 or 1	0	1 or 2	1 or 2	0 or 1 or 2
Is mission critical or less than \$1million capital expenditure	80	0 = no potential = Low Potential High Potential 1 2 =	2	2	subjective	0	2	2	2
Total Weighted Score			subjective	Low	subjective	subjective	High	subjective	subjective
Priority				7			1		