

Program Evaluation Survey (PES)- Mathematics Department- 1440-1441

First: In order to perform the statistical analysis, all the answers obtained from the respondents were coded, and then these answers were entered into the Statistical Analysis Program (SPSS).

Second: Since the variable that expresses the options (strongly agree, agree, True sometimes, disagree, strongly disagree) an ordinal scale, a five choices will be used (strongly agree (5), agree(4), True sometimes (3), Disagree (2), and strongly disagree (1)) The number expresses the weight of the choice and then expresses the weights. After that, we calculate the weighted arithmetic mean and this is done by determining the length of the period for each statement through coding the answers and calculating an average for each question.

Table (1)

Likert Scale

Statement	Interval length
Strongly disagree	1 to 1.79
Disagree	1.8 to 2.59
True sometimes	2.6 to 3.39
Agree	3.40 to 4.18
Strongly agree	4.19 to 5

The following are the results that were obtained from the analysis of the male/female questionnaire (sample size $n = 71$) in the Department of Mathematics:

First: Program evaluation questionnaire:

The questionnaire includes four main items in addition to the open questions, which are:

1. Help and Support for my Learning (7 statements).
2. Resources to Support my Learning (7 statements)
3. Evaluation of my Learning (6 statements).
4. Overall Evaluation (one statement).

Table (2)

Respondent Academic Level

Level	Frequency	Percentage
3	12	16.9%
4	4	5.6%
5	13	18.3%
6	7	9.9%
7	18	25.4%
8	17	23.9%
Total	71	100%

Table (3)
Arithmetic mean, Standard deviation and Percentages
For each statement

S.No.	Statement	Arithmetic mean					Standard deviation	Percentage	
1	Adequate academic and career counselling was available for me throughout the program	2.58	Strongly disagree	Disagree	True sometimes	Agree	Strongly agree	1.783	52%
		Frequency %	28	20	29.6	11.4	11		
2	The instructors were available for consultation and advice when I needed to speak with them	2.27	Strongly disagree	Disagree	True sometimes	Agree	Strongly agree	1.32	45.4%
		Frequency %	37	28	18	6	11		
3	The instructors in the program inspired me to do my best.	2.42	Strongly disagree	Disagree	True sometimes	Agree	Strongly agree	1.34	48.4%
		Frequency %	35	18.5	25.5	11	10		
4	The instructors in the program gave me helpful feedback on my work	2.82	Strongly disagree	Disagree	True sometimes	Agree	Strongly agree	1.32	56.4%
		Frequency %	20	22.5	30	12	15.5		
5	The instructors in the program had thorough knowledge of the content of the courses they taught	2.31	Strongly disagree	Disagree	True sometimes	Agree	Strongly agree	1.26	46.2%
		Frequency %	32	28	21	10	9		
6	The instructors were enthusiastic about the program	2.31	Strongly disagree	Disagree	True sometimes	Agree	Strongly agree	1.19	46.2%
		Frequency %	30	31	21	11	7		
7	The instructors cared about the progress	2.52	Strongly disagree	Disagree	True sometimes	Agree	Strongly agree	1.29	50.4%

	of their students	Frequency %	24	32	24	7	13		
8	Study materials in courses were up to date and useful.	3.00	Strongly disagree	Disagree	True sometimes	Agree	Strongly agree	1.37	60%
		Frequency %	17	21	28	13	21		
9	Library resources were adequate and available when I needed them.	3.15	Strongly disagree	Disagree	True sometimes	Agree	Strongly agree	1.40	63%
		Frequency %	20	4	44	6	26		
10	Classroom facilities (for lectures, laboratories, tutorials etc) were of good quality.	2.55	Strongly disagree	Disagree	True sometimes	Agree	Strongly agree	1.31	63%
		Frequency %							
11	Student computing facilities were sufficient for my needs.	3.07	Strongly disagree	Disagree	True sometimes	Agree	Strongly agree	1.43	61.4%
		Frequency %	21	14	21	24	20		
12	Adequate facilities were available for extra curricular activities (including sporting and recreational activities).	2.66	Strongly disagree	Disagree	True sometimes	Agree	Strongly agree	1.44	53.2%
		Frequency %	31	15	25	13	16		
13	Adequate facilities were available for religious observances.	2.84	Strongly disagree	Disagree	True sometimes	Agree	Strongly agree	1.38	56.8%
		Frequency %	22	19	29	13	17		
14	Field experience programs (internship, practicum, cooperative training) were effective in developing my skills. (Omit this item if not applicable to your program)	1.99	Strongly disagree	Disagree	True sometimes	Agree	Strongly agree	1.24	39.8%
		Frequency %	51	18	20	4	7		
15	What I have learned in this program will be valuable for my future.	2.30	Strongly disagree	Disagree	True sometimes	Agree	Strongly agree	1.19	46%
		Frequency %	31	30	25	7	7		
16	The program has helped me to develop sufficient interest to want to continue to keep up to date with new developments in my field of study.	2.30	Strongly disagree	Disagree	True sometimes	Agree	Strongly agree	1.17	46%
		Frequency %	29	31	27	6	7		

17	The program has developed my ability to investigate and solve new problems.	2.23	Strongly disagree	Disagree	True sometimes	Agree	Strongly agree	1.16	44.6%
		Frequency %	30	39	17	7	7		
18	The program has improved my ability to work effectively in groups.	2.24	Strongly disagree	Disagree	True sometimes	Agree	Strongly agree	1.18	44.8%
		Frequency %	34	30	20	13	4		
19	The program has improved my skills in communication.	2.42	Strongly disagree	Disagree	True sometimes	Agree	Strongly agree	1.33	48.4%
		Frequency %	32	24	24	9	11		
20	The program has helped me to develop good basic skills in using technology to investigate issues and communicate results.	2.40	Strongly disagree	Disagree	True sometimes	Agree	Strongly agree	1.36	48%
		Frequency%	34	24	20	10	12		
21	I have developed the knowledge and skills required for my chosen career.	2.45	Strongly disagree	Disagree	True sometimes	Agree	Strongly agree	1.24	49%
		Frequency%	29	23	27	9	12		
22	Overall, I was satisfied with the quality of my learning experiences at this institution.	2.15	Strongly disagree	Disagree	True sometimes	Agree	Strongly agree	1.15	43%
		Frequency%	35	32	20	7	6		

Analysis:

1. From the above table, we observe in the first item (help and support) there is a decrease in the average of the statements, where their mean is less than (3), and the level of satisfaction is less than 50%, with the exception of statements (1, 4 and 7), which gives satisfaction percentage above 50%. In general, satisfaction rates are considered low compared to the generally accepted satisfaction rates. I recommend the department's management to work on improving this item.
2. Regarding the analysis of the statements of the second item (Resources and support) there are (7) statements, where we notice a high level of satisfaction compared to the items of the first item, and the percentage of satisfaction exceeds 50%, except for statement (14), with percentage of satisfaction (39%) and an average less than (2) .

3. Regarding the analysis of the statements of the third item (Evaluation of the education) there are 6 statements), the satisfaction rate is below 50% for all of the statements.
4. As for the fourth item, which is the general assessment (one statement): we note that the general average was (2.15), with a standard deviation of (1.15), and the percentage of difference between the respondents' answers was (53.5%),
5. As for the open questions, they centered on changing some professors, focusing on distance learning, overcrowding in the academic schedule, lack of extra-curricular activities and the upscale treatment of some faculty members.
6. The department should reactivate extra-curricular activities, work on equipping the computer lab, and increase practical and training sessions effectively.

Recommendations:

1. Update labs and update computers packages
2. Math program should insure that its curriculum satisfies the needs of the labor market