Kingdom of Saudi Arabia Ministry of Higher Education Majmaah University College Of Sciences Department of Mathematics



ضض1ض بالمملكة العربية السعودية وزارة التعليم العالي جامعة المجمعة كلية العلوم بالزلفي قسم الرياضيات

Self-Study Report



April 2013

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Introductory Comments

A program self-study is a thorough examination of the quality of a program. The mission and objectives of the program and the extent to which they are being achieved are thoroughly analysed according to the standards for quality assurance and accreditation defined by the NCAAA.

A Self Study Report for Programs (SSRP) should be considered as a research report on the quality of the program. It should include sufficient information to inform a reader who is unfamiliar with the program about the process of investigation and the evidence on which conclusions are based to have reasonable confidence that those conclusions are sound.

Conclusions should be supported by evidence, with verification of analysis and advice from others able to offer informed and independent comments.

This SSRP should include all the necessary information for it to be read as a complete selfcontained report on the quality of the program.

The main branch/location campus must complete the entire SSRP together with the required information from all branch/location campuses that offer the program.

Each branch/location campus must complete an abridged, short version, of the SSRP; including the *Periodic Program Profile*, Profile sections (A-H) and standards 3, 4, and 11. After analysis and inclusion of required information, the main branch campus will submit the complete SSRP with the abridged versions to NCAAA.

The Self Study Report for Programs template is for an Undergraduate Program. For guidance on the completion of this template, please refer to the *Handbook for Quality Assurance and Accreditation* and to the *Guidelines for Using the Template for a Program Self-Study*.

A. General Information
Institution : Majmaah University
Title of College and Department in which the program is offered
College of Science in Zulfi, Department of Mathematics.
Title of Program
Bachelor degree in Mathematics.
Date of Report
December 10, 2012

Name and Contact details for Dean

Dr. Mohamed S. Al-Aboodi

KSA - Zulfi 11932- College of Science in Zulfi - Po.Box:1712 For inquiries and communication, call: Tel.: Fax 064227483 Fax: 064227484 E-mail: al-aboodi@hotmail.com

Name of Person Responsible for Preparation of Report (Head of Department)

Proof. Dr. Adel M. Zaki

Name and contact details for a person to contact for further information about matters discussed in the report and for arrangements for an external review visit. (if it is different to above)

Dr. Ahmed Elmoasry

B. General Program Profile Information

1. Program title and code: Mathematics, MATH

2. Credit hours required for the program completion: **137** credit hours

3. Award (s) granted on completion of the program (for community college programs, add degree granting policy)**Bachelor of Science in Mathematics (B.Sc. in Mathematics)**

4. Major tracks or pathways within the program: Only Mathematics

5. Professional occupations (licensed occupations, if any) for which graduates are prepared:

- 1. Continue higher educations in physics and obtain their PhD degree.
- 2. Working at research centers and universities.
- 3. Working at public and private sectors of education.
- 4. Working at medical laboratories, running machines, recycling its wastes.
- 5. Working in the industry sector.
- 6. Working at power stations.
- 7. Working at water stations, Ministry of Petrol, and Geology.

8

- 8. Working as a research assistant at King Abdul-Aziz City for Science and Technology.
- 9. Working at specialized research centers, quality control Labs. , standards and measurements bureau.
- 10. Working in the Ministry of Health, like hospitals; specialized in radiation protection.
- **11.** Control in some war machines within the army.
- 12. Working for banks.

6. Name of program chair/ coordinator. If a program coordinator or manager has been appointed for the female section as well as the male section, include names of both.

Program coordinator

Program manager

Dr. Ahmed Elmoasry

amoasry@yahoo.com

adelmzaki@hotmail.com

Prof. Dr. Adel M. Zaki

7. Branches/locations of the program. If offered on several campuses or by distance education as well as on-campus, including details.

Zulfi, Campus of colleges

8. Date of approval of program specification within the institution:

The program was introduced in 1426 H- 2007 G. Since then, the study plan has been updated several times. The last update was approved by the Department Board in 1434 H. 2013 and by College Board in 1435 H. 2014.

9. Date of approval by the authorized body (Ministry of Higher Education "MoHE" for private institutions) and Council of Higher Education for public institutions).

10. Date of most recent self-study (if any) : This is the first self-study report.

C. Periodic Program Profile Template B: College Data

College: _____Sciences_____Program: _____Mathematics_____

Table1: Faculty/Teaching Staff Members

No	Faculty/ Teaching Staff Names			Nationality	Academic Rank	General Specialty	Specific Specialty	Institutio n Graduate d From	Degree	List Courses Taught This Academi c Year	Part Time	Full or
	Name	Μ	F								F/ T	P/ T
1	Zaki, Adel Mohamed	\checkmark		Egyptian	Professo r	Mathematic s	Functional Analysis	Cairo, Egypt	Ph. D			
2	Abd EL-Hakiem, Mohamed	\checkmark		Egyptian	Professo r	Mathematic s	Fluid Mechanics	Asuit <i>,</i> Egypt	Ph. D			
3	Ben Messaoud, Hadi,	\checkmark		Tunisian	Professo r	Mathematic s	Complex Analysis	Tunis	Ph. D			
4	Khafagy, Salah	\checkmark		Egyptian	Ass. Professo r	Mathematic s	Functional Analysis	Egypt	Ph. D		\checkmark	
5	El-Saadani, Mohammed	\checkmark		Egyptian	Ass. Professo r	Mathematic s	Mathematica I Statistics	Egypt	Ph. D		\checkmark	
6	El-helow, Khaled	\checkmark		Egyptian	Ass. Professo r	Mathematic s	Pure Mathematics	Egypt	Ph. D			
7	Herz Allah, Mohamed.	\checkmark		Egyptian	Ass. Professo r	Mathematic s	Functional Analysis	Egypt	Ph. D		\checkmark	

8	Khalf, Mohammed.	\checkmark	Egyptian	Ass. Professo r	Mathematic s	Topology	Egypt	Ph. D	\checkmark
9	Megahed, Abd EL- Monem	\checkmark	Egyptian	Ass. Professo r	Mathematic s	Operations Researches	Egypt	Ph. D	\checkmark
10	Kellil Rabah	\checkmark	Tunisian	Ass. Professo r	Mathematic s	PDE	Tunis	Ph. D	\checkmark
11	KHALIL, Omar	\checkmark	Egyptian	Ass. Professo r	Mathematic s	Mathematica I analysis	Egypt	Ph. D	\checkmark
12	El-Moasry, Ahmed	\checkmark	Egyptian	Ass. Professo r	Mathematic s	Rough Sets.	Egypt	Ph. D	\checkmark
13	Zedan , Ahmad	\checkmark	Egyptian	Ass. Professo r	Mathematic s	Topology	Egypt	Ph. D	\checkmark
14	Attia, Mohamed	\checkmark	Egyptian	Ass. Professo r	Mathematic s	Numerical Analysis	Egypt	Ph. D	\checkmark
15	Ghareeb, Abd El- Nasser	\checkmark	Egyptian	Ass. Professo r	Mathematic s	Topology	Egypt	Ph. D	\checkmark
16	Nazmi, Kamal	\checkmark	Jordania n	Lecturer.	Mathematic s	Complex Analysis	Jordan	Maste r	\checkmark
17	Mahgoub,Mohamme d	\checkmark	Sudation	Lecturer.	Mathematic s	Optimal Control	Sudan	Maste r	\checkmark
18	Almuqrin, Muqrin	\checkmark	Saudi	Lecturer.	Mathematic s	Optimal Control	KSA	Maste r	\checkmark
19	Al-Zmami, Ahmed.	\checkmark	Saudi	Lecturer.	Mathematic	Finance	KSA	Maste	\checkmark

Mathematics Department

Zulfi, Faculty of Sciences

			S	Math.	r		
20							
21							
22							
23							
24							

Table 1: Number of graduates in the most recent year

	Undergraduate Students	Post Graduate Masters Students	Post Graduate Ph.D. Students
Male	28	-	-
Female	-	-	-
Totals	28	-	-

Apparent Student Completion Rate: The number of students who graduated in the most recent year as a percentage of those who commenced those programs in that cohort four, five, or six years previously (e.g. for a four year program the number of students who graduated as a percentage who commenced the program four years previously).

Table 2: Apparent Student Completion Rate:

Students	Undergraduate	Programs	Postgraduate Programs		
	Four Years	Five Years	Six Years	Master	Doctor
Male	7	15	6		
Female					
Totals	7	15	6		

Table 3: Mode of Instruction – Student Enrolment

Students	On Campus	Programs		Distance Education Programs				
	Full time	Part time	FTE	Full time	Part time	FTE		
Male	185							
Female								
Totals	185							

(Excluding preparatory program)

Note: FTE (full time equivalent) for part time students assume a full time load is 15 credit hours and divide the number of credit hours taken by each student by 15 (use this formula only for part time students).

Table 4: Mode of Instruction – Teaching Staff

Number of	On Campus Programs			Distance Education Programs		
Teaching Staff	Full time	Part time	FTE	Full time	Part time	FTE
Male	19					
Female						
Totals	19					

(Excluding preparatory program)

Note: Teaching staff is including tutors, lectures, and assistant, associate and full professors. This does not include research, teaching, or laboratory assistants. Academic staff who oversee the planning and delivery of teaching programs are included (e.g. head of department, dean for a college, rector and vice rectors).

D. Program Profile Data Historical Summary

Provide a brief historical summary of the program including such things as:

- When and why was it introduced?
- Student enrolment history.
- Relationships with industry or professional advisory groups.
- Graduate employment outcomes.
- Major program changes.

Include brief comments about what are believed to be the programs main strengths and accomplishments and any significant problems or concerns that are being addressed.

Preparatory or Foundation Program

Do you offer a preparatory program	Yes	Νο	\checkmark			
If yes, is the preparatory program is offered, is	s it out-s	ourced?	Yes	No 🗸		
If a preparatory or foundation year program students required to take that program? Ye	is provic es	led prior No	to entry to	this prog	ram, are	e all
If yes, how many Academic credits are granted into the program and included in the * GPA						
What is the total number of cred	lits req	uired b	oy the			

NOTE: * Credits granted into the program must be included in the GPA

List the courses that are granted into the program.

Number,		Distribution					
course	Course name	Theoretical	Evercises	Practical	Cortified	Prerequisite	Reviews
code		medietical	LACICISES	Flactical	Certifieu		
PENG	English Languago 1	2	0	6	0		
111	English Language 1	2	0	0	0		
PMTH	Introduction to	2	1	0	2		
112	Mathematics 1	2	Ŧ	0	2		
PCOM	Computer Skills	1	0	1	2		
113	Computer Skills	T	0	Ţ	2		
PSSC	Communication and	1	0	1	2		
114	Education Skills	1	U	1	۷		
Total units 14 unit							

Table 5: 1stlevelcourses (pre-primary)

Table 6: 2ndlevelcourses (pre-primary)

Number,	Course name	Distribution		Proroquisito		
course code	Course name	Theoretical	Exercises	Practical	Certified	Prerequisite
PENG	English Language 2	2	0	٨	c	DENC111
121	English Language 2	2	0	4	D	PENGIII
PMTH	Introduction to	1	0	0	Л	DMTH 112
127	Mathematics 2	4	0	0	4	
PENG	English for engineering	1	0	1	2	DENG111
123	and scientific disciplines	1	0	1	2	FENGIII
PPHS	Physics	2	0	1	2	
128	FILIYSICS	2	0	Ŧ	C	
Total units		15 units				

Table 7: 3rdlevel courses

Number, course	Course name	Distribution	Distribution of major units				
code	Course name	Theoretical	Exercises	Practical	Certified	Prerequisite	
MATH 231	Foundations of mathematics	3	1	0	4	PMTH 1 27	
STAT 201	Statistics and probability 1	2	1	0	3	PMTH 1 27	
MATH 201	Calculus (1)	3	1	0	4	PMTH 1 27	
MATH 271	Introduction to Geometry	2	1	0	3	PMTH 1 27	
ARAB101	Language Skills	2	0	0	2		
SALM 101	Islamic culture	2	0	0	2		
Total units			18 units				

Mathematics Department

Table 8: 4thlevel courses

Number,	Course name	Distribution	of major un	its		Proroquisito
course code	Course name	Theoretical	Exercises	Practical	Certified	Prerequisite
MATH 202	Calculus (2)	3	1	0	4	MATH 201
MATH 203	Calculus in several variables	3	1	0	4	MATH 202*
MATH 204	Vector Calculus	3	1	0	4	MATH 202 * +MATH 271
MATH 241	Linear algebra (1)	3	1	0	4	MATH 231
	University Elective	2	0	0	2	
Total units		18 units				

Table 9: 5thlevel courses

Number,		Distribution		Droroquisito		
course code	Course name	Theoretical	Exercises	Practical	Certified	Prerequisite
MATH 321	Introduction to Differential Equations	3	1	0	4	MATH 203
MATH 351	Numerical analysis (1)	3	1	0	4	MATH 241 +MATH 321*
MATH 352	Linear programming	3	1	0	4	MATH 241
MATH 353	Mathematical applications in Computers	1	1	0	2	MATH 203 +MATH 351*
	Department Elective	2	0	0	2	-
SALM10 2	Islam and society construction	2	0	0	2	SALM 101
Total units		18 units				

Table 10: 6th level courses

Number, course	Course name	Distribution		Proroquisito		
code	Course name	Theoretical	Exercises	Practical	Certified	Prerequisite
MATH 322	Mathematical Methods	3	1	0	4	MATH 321
MATH 342	Group Theory	3	1	0	4	MATH 241
STAT302	Statistics and probability (2)	3	1	0	4	STAT 201 +MATH 203
MATH 381	Real Analysis (1)	2	1	0	3	MATH 203
	Department Elective	2	1	0	3	
Total units		18 units				

Number,	Course name	Distribution	modules			Droroquisito	
course code	Course name	Theoretical	Exercises	Practical	Certified	Prerequisite	
MATH 423	Partial Differential Equations	3	1	0	4	MATH 321	
MATH443	Rings and Fields	2	1	0	3	MATH 342	
MATH 472	Introduction to Topology	2	1	0	3	MATH 381	
MATH 473	Introduction to Differential Geometry	3	1	0	4	MATH 241 +MATH 204	
SALM 103	Economic system in Islam	2	0	0	2	SALM 101	
	Department Elective	2	0	0	2		
	Field training	0	0	0	0	Pass the 100 module	
Total units		18 units					

Table 11: 7th level courses

Table 12: 8thLevel

Number,	Course name	Distribution	modules			Droroquisito	
course code	Course name	Theoretical	Exercises	Practical	Certified	Prerequisite	
	Department Elective	2	1	0	3		
MATH 483	Complex Analysis	3	1	0	4	MATH 381	
MATH 484	Introduction to functional analysis	2	1	0	3	MATH 472	
	University Elective	2	0	0	2		
MATH 499	Project	2	2	0	4	Pass the 100 module	
	Free course	2	0	0	2		
Total units		18 units					

Statistical Summary

NOTE: FOR ALL TABLES IN THIS SECTION A SEPARATE TABLE MUST BE USED FOR EACH BRANCH/LOCATION CAMPUS.

Table 13: Student Enrolment

Students	On Campus Programs			eLearning Education Programs		
	Full time	Part time	*FTE	Full time	Part time	*FTE
Male	185					
Female						
Total	185					

(Doesn't include preparatory or foundation programs)

NOTE: To calculate effective full time equivalents (FTE) for part time students supposed to a notional full time load is 15 credit hours and divide the number of credit hours taken by each student by 15. (Use this formula only for part time students)

Table 14: Confirmed enrollment at the beginning of the current academic year

Level/Year of Study	Male	Female	Total
First Year	45		
Second Year	42		
Third Year	68		
Fourth Year	30		
Fifth Year (if applicable)			
Sixth Year (if applicable)			
Total	185		

Table 15: No. of Staff

No. of Staff	On Campus			eLearning Education		
	Full time	Part time	FTE	Full time	Part time	FTE
Faculty	46					
Teaching staff	24					

Faculty: FTE is calculated as 12 credit hours. The number should not include research, teaching or laboratory assistants.

NOTE: The number of faculty and teaching academic staff should include:

- Faculty: Assistant, Associate and Full Professors whether involved with teaching, research or both teaching and research.
- Teaching staff: Lectures, Teaching Assistants, Practical Preceptors
- The number should not include Technicians and Laboratory Assistants.

	Ph.D.		Masters		Others		Total	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Male			16	66%	8	33%		
Female								
Total			16	66%	8	33%		

Table 16: Post-graduation and academic members.

Average faculty workload and class enrollment

A. Calculate the average number of credit hours taught by the **full-time academic staff** for the last year and calculate the average number of students enrolled per class taught.

Table 17: No. of full-time faculty ave	erage credit workload
--	-----------------------

	Average Credit	Average	Average Class	Average Class
Full-time Faculty	Workload	Credit	Enrollment	Enrollment
	1st Semester	Workload	1st Semester	2nd Semester
		2nd Semester		
Male	14	12	17	15
Female				
Total	14	12	17	15

Provide Analysis – Analyze the entire table and provide detailed class enrollment analysis of the different instructional levels.

1. Workload Analysis:

The workload of the faculty staff is ranging between 12 hours and 14 hours weekly which approaches the average work which is (12+14)/2=13 hours.

2. Class enrollment analysis:

The average of class enrollment is 16.

3. Class enrollment level analysis (Level means post or under graduate levels and year to year levels):

We have only under-graduate students and students in the first- term represent 14 % of the total number of students and about 22 % is the ratio of second year students.

Average credit workload – Add the total number of credit hours taught by each individual teaching faculty member, add them all together, and divided by the full-time or part-time number of faculty members.

Average class enrolment – Add the total number of students enrolled in all classes taught by each individual teaching faculty member and divide the total by the number of taught classes. Add all the totals together and divided by the total number of faculty members.

B. Calculate the average number of credit hours taught by the **part-time faculty** for the past year and calculate the average number of students enrolled per taught class.

Table 18: No of part-time faculty

Part-time Faculty	Average Credit Workload- 1st Semester	Average Credit Workload- 2nd Semester	Average Class Enrollment 1st Semester	Average Class Enrollment- 2nd Semester
Male				
Female				
Total				

Provide Analysis – Analyze the entire table and provide detailed class enrollment analysis of the different instructional levels.

- 1. Workload analysis:
- 2. Class enrolment analysis:

3. Class enrolment level analysis (Level means post or under- graduate levels and year to year levels):

C. Calculate the average number of credit hours taught by the **full-time teaching staff** for the past year and calculate the average number of students enrolled per taught class.

Table 19: NO. of Full-time Teaching Staff

	Average Credit	Average Credit	Average Class	Average Class	
Full-time	Workload-	Workload-	Enrollment-	Enrollment-	
Teaching Staff	1st Semester	2nd Semester	1st Semester	2nd Semester	
Male	13	12	19	18	
Female					
Total	13	12	19	18	
Provide analysis – Analyze the entire table and provide detailed class enrollment analysis of the different instructional levels.					

1. Workload analysis:

The average workload is 12.5 hours per semester and the official teaching staff load is 18 hours.

2. Class enrolment analysis:

3. Class enrolment level analysis (Level means post or under- graduate levels and year to year levels):

D. Calculate the average number of credit hours taught by the **part-time teaching staff** for the past year and calculate the average number of students enrolled per taught class.

(No Part-time teaching staff is hired in the department)

Part-time	Average Credit	Average Credit	Average Class	Average Class
Teaching Staff	Workload-	Workload-	Enrollment-	Enrollment-
	1st Semester	2nd Semester	1st Semester	2nd Semester
Male				
Female				
Total				

Provide Analysis – Analyze the entire table and provide enrollment detailed class analysis of all different instructional levels.

1. Workload Analysis:

2. Class enrolment analysis:

3. Class enrolment level analysis (Level means post or under- graduate levels and year to year levels):

E. Self-Study Process

Provide the following:

Provide a summary description of the procedures followed and administrative arrangements for the self- study.

Provide a quality assurance organization flowchart.

Describe membership and terms of reference for committees and /or working parties.

College of Science in Zulfi seeks to draw a road map to guide development in the college for the coming years inspired by the goals and objectives of the strategic plan of the college.

Since achieving accreditation was one of the main objectives of the College which began to develop a set of practical steps, procedures and administrative arrangements adopted in the implementation of the process of self-evaluation in accordance with the following procedures:

- The creation of the Development Agency and a Quality Unit at the College to take care of the themes of development and continuous assessment of the academic departments in the College. These include the Agency, the Development Unit, the unity of the quality and the integrity of electronic transactions, in addition to the formation of standing committees specialized in how to develop the quality within the committees of the three departments in the College.

-A committee was formed for the quality and the commission to oversee the College level. The College seeks to unify and integrate efforts with respect to the integration of all academic departments. Particularly, regarding quality and academic accreditation.

-Took over the agency 's overall responsibility for the development and supervision of the quality Calendar developmental process in the various departments of the college to apply for the adoption of the Academy.

Here are the steps that have been followed in the process of self-evaluation:

1- The announcements of the project accreditation start. Initially, it was announced at the college and the various departments for the start of work on a self-study report and the distribution of the number of files in Arabic language and a set of files in English, in which they include a description of required steps to fill out a form measures of self-evaluation and prepare a self-study report, as well as collecting and providing evidence and documents required.

F. Mission, Goals and Objectives

1. Mission Statement of the program (Insert the Mission statement).

Mission: Providing graduates with skills to be able to communicate with outside Society and contribute to this society; obtaining information to critically assess numerical and graphical solutions; learning to formulate strategies for solving problems; acknowledging the importance of being intellectually curious throughout their long lives, pursuing their postgraduate interests, including graduate study, teaching, and private or government employment.

Use the following table and write clear, measurable goals and objectives of the program and align each one with quality performance indicators and the target benchmark.

NOTE: A SEPARATE TABLE MUST BE USED FOR EACH BRANCH/LOCATION CAMPUS (This table is not referring to NCAAA KPIs or the program KPIs).

2. Goals	3. Objectives for each goal	4.	5. Target
		Performance Indicators	Benchmarks
Mathematics majors will develop computational skills in first-year calculus needed for more advanced calculus- based courses.	 Students will: a. evaluate derivatives for complexly constructed elementary functions; b. evaluate definite and indefinite integrals; and c. Evaluate limits using algebraic, geometric, analytic techniques. 		
Mathematics majors will learn and retain basic knowledge in the core branches of mathematics.	 Students will, during their senior year: a. demonstrate proficiency in calculus; b. demonstrate proficiency in linear algebra; and c. Demonstrate proficiency in algebra. 		
Mathematics majors will be able to learn and explain mathematics on their own	 Students will: a. read a mathematics journal article and explain it, orally or in writing, to an audience of math majors and b. After graduation, be able to master new mathematics necessary for their employment. 		
Mathematics majors will be able to read and construct rigorous proofs.	 Students will: a. construct clearly written proofs which use correct terminology and cite previous theorems; b. construct proofs using mathematical induction; c. construct proofs by contradiction; and d. Judge whether a proof is sound. 		

	and identify errors in a faulty proof.	
Mathematics majors will be able to obtain employment in their area of mathematical interest or gain admittance to a graduate program in mathematics.	 Students who: a. seek admission to graduate schools in mathematics will succeed in gaining admission, and perform adequately in these programs; b. seek entry-level employment in math-related fields will obtain it; c. specialize in actuarial science will obtain entry-level work as actuaries, if they seek it; d. specialize in secondary education will demonstrate proficiency in mathematics needed to obtain Initial Certification in New York State; or e. Seek jobs in secondary or elementary education will obtain will obtain year of the appropriate grade level. 	
Master's students will recognize connections between different branches of mathematics.	 Students will: a. correctly incorporate specific examples from one branch of mathematics into their study of another branch of mathematics (e.g., Lp-spaces as an example in linear algebra) and b. Identify and explain cases in which major results of one branch of mathematics rely nontrivially on results from another branch (e.g., the application of linear algebra to solving systems of differential equations). 	
Graduating master's degree students will be able to obtain employment in their	Students who: a. seek admission to doctoral programs in mathematics, applied mathematics, mathematical finance,	

area of mathematical	mathematics education or other math-related fields will succeed in gaining admission to such
admittance to a doctoral program in mathematics.	 programs, and perform adequately in these programs; b. seek employment as full-time instructors at community colleges or as part-time instructors at four-year colleges or universities will obtain it; and c. Seek employment in other math-related fields will obtain it.
Provide a list of the strengths and data	recommendations for improvement based on an assessment of this

GOALS refer to the major program aims, ambitions, and purposes (**What** the program is attempting to accomplish?)

OBJECTIVES refer to specific action points the program has in place to achieve each goal (**How** is the program attempting to accomplish the goals).

PERFORMANCE INDICATORS refer to the measurement criteria used to evaluate each objective.

TARGET BENCHMARK refers to the intended or desired outcome that is anticipated when each goal is complete.

SUMMARY ANALYSIS refers to a study compare to all target benchmarks with the actual outcomes determined by the performance indicators (Examine all the goals together and compare and contrast the expected target results with the actual results provided by the performance indicators.). The summary analysis is an overall assessment of the success that achieves the program goals.

2. Program Evaluation in Relation to Goals and Objectives for Development of the Program.

NOTE:

Reports on these items should be expanded as necessary to include tables, charts or other appropriate forms of evidence, including trends and comparisons with past performance, or with other institutions where relevant.)

Information should be provided on performance indicators that relate directly in alignment with the mission, goals and objectives

1.State goal/objective <u>Goal 1:</u> Students shall demonstrate a solid understanding appropriate for the 1st- 8th– Mathematics level required in their majors.

Obj.1 Showing proficiency in basic skills and concepts embedded in their courses. Obj.2 Applying concepts and skills to solve challenging problems that are either purely mathematical or arise in other disciplines.

Target benchmark or standard of performance KSU

Result achieved or actual benchmark

Comments and analysis

2. State goal/objective

Goal 2: Students shall demonstrate communicating skill, quantitative information and reasoning effectively for courses in their majors.

Obj.3 Using appropriate software as a tool in coursework.

Obj.4 Work effectively in cooperative groups to solve mathematical problems appropriate.

Obj.5 Using appropriate presentation tools to support the communication of mathematical documents.

Obj.6 Giving oral presentations to mathematics peers and professors.

Target benchmark or standard of performance

KSU

Result achieved or actual benchmark

Comments and analysis

Mathematics Department

3 State goal/objective

Goal 3: Students shall demonstrate a breadth and depth of knowledge within mathematics.

Obj.7 Applying such concepts and skills as appropriate in either upper division mathematics courses or quantitative courses in other majors.

Obj.8 Demonstrating an appreciation for how Mathematics relates to the world around us.

Obj.9 Demonstrating an appreciation for the subfields, values and traditions of the discipline.

Target benchmark or standard of performance

Result achieved or actual benchmark

Comments and analysis

4 State goal/objective Goal 4: Students in majors will demonstrate an understanding of mathematical structures and proof.

Obj.10 Showing an ability to read technical and rigorous mathematics. In addition, Mathematics majors, double-majors and minors shall:

Obj.11 Showing an ability to complete proofs in courses at both the 300-and 400-levels. Obj.12 Showing ability to present purely mathematical ideas and undergraduate-level arguments.

Target benchmark or standard of performance

Result achieved or actual benchmark

Comments and analysis

2- Formation of committees at the College's levels and sections:

Committees have been formed at the college level and at the district level to accomplish the tasks associated with a project of academic accreditation in every department of the College, and in coordination with the various committees of the College, as shown in the following figure:

No	Name	Degree	Adjective	Mobile
1	Dr. Ahmed Mohamed Elmoasry	Assistant	Chairman of	0589232237
		Professor	Committee	
2	Prof. Dr. Mohamed Abdel-Hakim Ahmed	Professor	Commission Agent	0595871149
3	Dr. Ahmed Abdullah Zedan	Assistant	Member	0534718192
		Professor		
4	Mr. Kamal Nazmi	Lecturer	Member	0507259630
5	Mr. Abdulla Wadeed Alseqaana	Student	Member	0532999553
6	Mr. Ahmed Abdel-Mohsen	Student	Member	0531590994

Table 20: Members of the Quality & Accreditation Unit

Table 21: Table 16: The work teams to veri	fy the eleven standard of NACCC
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Name of Member	Standard	
Dr. Salah Khafaji Dr. Mohammed Shahat Dr.Mohamed Attia	Institutional context	Mission and Objectives Program - Administration Quality Management and Improvement
Dr. Mohammed Harazallah Dr. Omar Mahjoub Dr. Kamal Nazmi	Quality of learning and teaching process	Learning and Teaching.
Dr. Khalid ElHelw Dr. Mohammed Khalf	Students Learning support	Student Activities Learning Resources
Dr. Ahmad Zedan Dr. Abdel -Monem Mujahid Dr. Rabeh Kalil	Infrastructure services support	Facilities and Equipment Financial Planning and Management Employment Processes
Prof. Adel Zaki Prof. Mohamed Abdel- Hakim Prof. Hadi bin Masood	Community service	Scientific research Community Relations
Dr. Omar Khalil	Questionnaires, collection and	Statistical Analysis team

Self-Study Report		
Dr. Abdel Nasser Gareeb	analysis	



G. Program Context

1. Describe the significant elements in the external environment (including any important recent changes)

2. Enrolment management and cohort analysis (complete tables on the following pages)

Cohort Analysis refers to track a specific group of students who begin a given year in a program and following them until they graduate (How many students actually start a program and stay in the program until completion?).

A **cohort** refers to the total number of students enrolled in the program at the beginning of each academic year, immediately after the preparatory year. No new students may be added or transfer into a given cohort. Any students that withdraw from a cohort may not return or be added again to the cohort.

Cohort Analysis Table 1: provides complete tracking information for the most recent cohort to complete the program, beginning with their first year and tracking them until graduation (students that withdraw are subtracted and no new students are added).

Cohort of the Academic Year: tables refer to current cohort tracking that is in progress. A separate cohort tracking table should be provided for each year.

3. Analyze the mission, goals, content, and methods to the delivery of the program and describe any implications for changes that may be required as a result of changes noted under 1 and 2.

NOTE: A SEPARATE TABLE MUST BE USED FOR EACH BRANCH/LOCATION CAMPUS.

Table 22: Enrollment Management and Cohort Analysis

Student Category	2010 - 11	2011 - 12	2012 - 13
Total cohort enrollment	88	65	80
Retained till year end	10	7	2
Withdrawn during the year			
and re-enrolled the following			
year	54	23	4
Withdrawn for good			
Graduated successfully			

* PYP - Preparatory Year Program

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Provide a Cohort Analysis of the Academic Years: 2008 – 2011

H. Program Developments

1. <u>Provide a list</u> of changes made in the program in the period since the previous self-study or since the program was introduced. This should include such things as courses added or deleted or significant changes in their content, changes in approaches to teaching or student assessment, or program evaluation processes etc.

2. Comparison between planned and actual enrollment.

Year	Planned Enrollment	Actual Enrollment
2010-2011	100	41
2011-12	100	45
2012-13	100	50
2013-14	100	56

Table 23: Comparison between planned and actual enrollments

Provide analysis and an explanation report if there are significant differences between planned and actual numbers.

I. Evaluation in Relation to Quality Standards

(Refer to Standards for Quality Assurance and Accreditation of Higher Education Programs)

NOTE FOR SECTION H

Response reports should be provided under each of the quality sub-standards set out in the *Standards for Quality Assurance and Accreditation of Higher Education Programs*.

- To ensure that full understanding of the SSRP's explanatory reports are included in order to give background information or explanations of processes relevant to the standard or sub-standard concerns.
- Reports should summarize the process followed by an investigation of the performance in relation to each standard and sub-standard.
- A vital element of the SSRP is to provide specific data, show trends, support conclusions, and make appropriate comparisons with other programs selected to provide benchmarks for evaluation of performance. This data may include key performance indicators, other statistical information, figures derived from survey

results, student results or anything that provides clear evidence about the matter being evaluated. A simple assertion that something is good, or needs improvement, is not sufficient without evidence to back it up.

• Integrated into this SSRP are KPI tables for measurement of quality. Each KPI table is

placed at a specific point where quality assurance must be demonstrated. Programs may use NCAAA KPIs or develop their own KPIs to complete them.

NOTE: Programs are required to use 50% or more of the suggested NCAAA KPI's.

While taking into account the distribution of tasks which has been done to involve all members of the faculty, staff and students, and the number of disciplines which are taken into account of the experience and different degrees for each faculty member.

Gathering information and evidence:

A committee was formed for the adoption and quality of coordination between different departments in terms of providing the necessary data, evidence and indicators related to the model standards of self-evaluation as well as the self-study report for the program in each section separately.

The teams work in the department filling out a form of self-evaluation standards in the special part of the criteria that is specific to each committee , and has filed a form with the report on the work done and the most important strengths and weaknesses of the aspects covered by the standards . It also has provided an illustrative description of the procedures concerning the standards of the reality of what is actually in the department. It was then dump the different models independently to provide the necessary data for the preparation of self-study report.

3- Writing self-study report:

The plan has been prepared for the improvement and development of the program based on the findings and recommendations of the self-evaluation, the plan includes a clear definition of the steps and the tasks you want to work, and members of the department officials reported, at the time for completion. It will be the follow-up implementation plan and review its progress regularly in the department in line with the recommendations of the report.

Key Performance Indicators (KPI)

(Please state indicators and standards of excellence that have been selected to represent the evidence on the quality of the program or to achieve the objectives of the program towards the development).

Table 24: Key Performance Indicators (KPI)

Standard	Key Performance Indicators (KPI)	The level of
		Data
1 - Mission and Goals	Views that were obtained by asking members for their opinion in the message. The extent of fitness of the message with the needs and aspirations of society. Members and decision-makers about the usefulness of the program 'message statement' to the decision-making process. Awareness of faculty and staff program, about program mission and support it. Proportion of the important decisions that are made by reference to the message. Contain criteria to evaluate all proposals of the establishment courses and paragraph states that agree with the proposed decision and created message program.	Program, College, Institution
2 - Power management	Members' opinion about the supreme authority in the effectiveness of the Council (or administration), regarding the development of public policy for the program and supervision, and the extent of their understanding of the strategies needed to achieve the goals, and the extent of convergence of opinion between the various groups that make up the Board of Directors. The presence of self-examination reports issued by the management of the program, and the main administrative committees, where the decline in performance, which plans to improve this performance. Meeting schedule forms: securities: minutes of meetings and private management which can show a clear focus on issues and strategy (or absence of this focus. The extent of achievement of the objectives set out in the annual work plans. Contain the Job descriptions or the power of the committees on the main mechanisms which are responsible for and clear accountability, as well as, clear mechanisms to assess performance. Number of times in which a section to notify all employees by the developments in the section, and topics that interest	Program, College, Institution

	section attached at the moment.	
	Responses of the members of the faculty and staff at the department questionnaires about the things that tell them by section, showing awareness of developments in the section, and issues that interest attaches section, also indicate whether they themselves are interested in these things already. The extent to which the department faculty and staff and students by the existence of rules and policies related to them, and affect them and the extent of their knowledge of these rules. Replies program faculty and staff at the polls for the climate section	
3- Quality assurance Management and improvement	1 - Overall rating of the quality of student learning experiences in the organization (the median estimate of students on a scale annual appreciation of five points for the final year students)	Program, College, Institution
	2 - the proportion of studying courses in which the students take during the calendar year	Program, College, Institution
	3 - the proportion of the programs that ratification by the independent standards (levels) student achievement during the year by people from within the organization	Program, College, Institution
	4 - the proportion of the programs that ratification by the independent standards (levels) student achievement during the year by people outside the organization	Program, College, Institution
4 - Learning and Teaching	5 - The ratio of students to faculty (full-time or equivalent)	Program, College, Institution
	6 - Determination of students overall quality courses (average estimate of my students on a scale of five points for the overall evaluation of the decisions)	Program, College, Institution
	7 - the proportion of faculty who hold doctorate qualifications validated	Program, College, Institution
	8 - the percentage of students entering programs who have successfully completed the first year	Program, College, Institution

	9 - the percentage of students in undergraduate programs entrants who have completed the minimum period	Program, College, Institutior	
	10 - percentage of students entering graduate programs who have completed on time		
	 11 - percentage of graduates from undergraduate programs who are in a period of 6 months of graduation: A - Employ b - enrolled in the study C - did not seek to recruit or study 	Program, College, Institutior	
	12 - percentage of students to administrative staff	Institution	
	13 - percentage of the operational budget (excluding the amounts of bonuses, housing students) allocated to the provision of student services	Institutior	
5 - Department of Student Affairs and Support Services	14 - Evaluating career for academic students guidance and (average estimates of the extent appropriate psychological counseling and vocational annual appreciation on a scale of five points for the final year students)	Institutior	
	15 - Number of the books titles in the library proportion to the number of students	Institution	
	16 - The number of subscriptions to online resources Proportion to the number of existing programs	Institutior	
C. Learning	17 - The number of subscriptions to periodicals proportion to the number of programs offered	Institution	
Resources	18 - Student Assessment of Library Services (average estimates of the extent of suitable library services on a scale of estimated annual five points for the final year students)	Institutior	
	19 - Annual spending on information technology proportion to the number of students	Institutior	
7 - Facilities and	20 - The number of computers provided for each student	Institutior	
Equipment	21 - year average of the extent of suitable facilities and equipment through a poll of faculty	Institutior	
	22 - bandwidth for each user of the Internet	Institutior	
8 - Financial Planning and Management	23 - total operating expenses for each student (without bonuses amounts to students and housing)	Institutior	
9 – recruitment	24 - percentage of faculty who left the university in the past	College,	
	year for reasons other than retirement due to age	Institution	
	25 - percentage of faculty participating in professional	College,	
	development activities last year		
	20- The proportion of faculty participating in professional development last year	Institution	
10 – Research	27- Number of what was nublished in scientific journals in the		
10 Nescuren	provious year for each member of the faculty full time or	Institution	
	equivalent		
---------------------	--	-------------	--
	28- The proportion of faculty (full-time) who have at least one		
	search arbitrator in the previous year	Institution	
	29- The number of working papers or reports submitted to the	College,	
	conferences over the past year for each of the faculty full-time or equivalent		
	30- Find income from outside sources in the previous year the	College,	
	proportion of the number of members of the full-time faculty	Institution	
	31 - percentage of total operational funding spent on research		
		Institution	
11 - Relations with	32 - percentage of faculty members and other staff who have	College,	
the community	provided community service activities	Institution	
	33 - The number of community education programs provided	College,	
	proportion to the number of sections	Institution	

4-Key performance indicators:

- 1. Overall rating of the quality of the program to students and courses.
- 2. The proportion of courses in which the students take during the calendar year
- 3. The degree of overall evaluation of the program by self- residents from within the program.
- 4. Ratio of students to faculty members (full-time or equivalent)
- 5. The proportion of faculty who hold doctorate qualifications validated
- 6. The percentage of students who completed the program successfully completed the first Year
- 7. The proportion of graduates of the total admitted and enrolled in the program
- 8. The opinion of the students in the quality and relevance of teaching methods.
- 9. The opinion of the faculty members in the quality and relevance of teaching methods
- 10. The opinion of independent evaluators in the quality and relevance of teaching methods.
- 11. The proportion of graduates runs through recruitment or register to graduate.
- 12. Satisfaction rate employers for graduates of the program.
- 13. The extent of absorption of the program of the variables affecting it.
- 14. The proportion of faculty members enrolled in training courses required by the program.
- 15. The rate and diversity of media and teaching strategies used by faculty members.
- 16. The number of hours of hands-on training provided by the program.
- 17. Appropriateness of teaching methods as evaluated by students

Mathematics Department

- 18. The number of courses offered to faculty members in the school year.
- 19. Statistical research, seminars and conferences for members of the faculty.
- 20. Participation rate of faculty members in seminars and meetings related to the latest
- 21. Developments in the specialty.
- 22. The proportion of faculty members who have qualified PhD who assume teaching in the program.
- 23. The number of students enrolled in the training courses
- 24. The rate of diversity in the methods of evaluation in the current school year.
- 25. Questionnaires distributed to students, graduates and employers.
- 26. Responsiveness to students' opinions and suggestions in the evaluation of courses.
- 27. The extent of the response to the opinions and suggestions of graduates in the evaluation of the program.
- 28. The extent of the response to the views of employers and suggestions in the evaluation of program outputs.

Standard 1: Mission and Objectives

(Overall Rating: ****)

The mission of the program must be consistent with that for the institution and apply that mission to the particular goals and requirements of the program concerned. It must clearly and appropriately define the programs principal purposes and priorities and be influential in guiding planning and action.

Effective and arranged planning and development normally requires that a program have a succinct mission statement, summarizing in a few sentences what it is trying to achieve as a guide to detailed planning and development.

We must consider the following points when preparing the mission:

- 1- The mission statement should establish priorities for development and quality improvement which it the basic element in the quality assurance process.
- 2- It should generate a sense of ownership of all those involved in the program, should be periodically reviewed and consistently referred to as a basis for planning and evaluation.
- 3- It should be consistent with the charter establishing the institution, and realistic in relation to the capacity of the institution in the environment within which it is operating, but at the same time present challenges for development and improvement.
- 4- Should be thought of goals as mission applications to specific activities. Must be expressed in general terms of the direction of detailed planning.
- 5- Objectives should be linked through strategic planning processes with respected to the mission and goals.
- 6- They should be more specific and include intended results to be achieved within a time table.

This standard relates to the way the mission statement has been developed and which expressed the effectiveness of the program and the relationships between the mission and the goals and objectives.

Questionnaire was conducted on a group of faculty staff and students. The number of staff shared in this questionnaire was 20 and the number of student shared in this questionnaire was 37.

Provide an explanatory report about the development and use of the mission for each of the following sub-standards:

1-1 Appropriateness of the Mission

The mission, vision, goals and objectives of the Department of Mathematics have been designed to work together to define the Department's uniqueness. Vision of the Department of Mathematics leading the way towards achieving outputs of high caliber in mathematics and its applications, and participating in enriching the society. Mission of the Department of Mathematics offering excellent programs aimed at graduating students in all degrees in the field of Mathematics and its applications capable of meeting the developmental needs of society, as well as enriching knowledge through education.

Questionnaire was conducted on a group of faculty staff in mathematics department and students about: The mission statement for the program is consistent with the mission of the institution and establishes directions for the development of the program that are appropriate for a program of its type and for the needs of students in Saudi Arabia. The results were presented as follows:

Appropriateness of the Mission		
	staff (20)	Students
		(37)
Strongly agree	29%	28%
Agree	55%	46%
True to some extent	15%	21%
Disagree	1%	5%
Strongly disagree	0%	0%

Table26: Appropriateness of the Mission



Figure 2 : Staff and students response to the statement "Appropriateness of

the Mission".

Remarks: It is noticed that, the majority of faculty staff in mathematics department and students believe that the mission of the program is suitable for the institution and the nature of the programs of this kind in the Kingdom of Saudi Arabia.

1-2Usefulness of the Mission Statement

The mission reflects the development of the program plans and its orientations, which is an effective tool to align department members around a common purpose. The mission statement establishes directions for the participation in providing education, providing community services, and stimulating research process, throughout qualified outputs fulfilling the national qualifications framework for bachelor degree.

Questionnaire was conducted on a group of faculty staff in mathematics departmentand students about: The mission statement is specific enough to guide to decision-making and choices among alternative planning strategies and provides clear criteria for evaluation of progress towards the objectives of the program.

The results were presented as follows:

Table27: Rating of Staff and Students on the usefulness of the mission

Usefulness of the Mission Statement		
	Staff (20)	Students (37)
Strongly agree	18%	23%
Agree	52%	44%
True to some extent	27%	24%
Disagree	3%	7%
Strongly disagree	0%	1%





Remarks:

It is noticed that nearly 70% of faculty staff in mathematics department and students believe that the mission statement is useful in directing the planning and decision-making related to the program.

1-3 Development and Review of the Mission

Questionnaire was conducted on a group faculty staff in mathematics department and students about: Major stakeholders associated with the program have been consulted and support the mission and the mission statement is periodically decided or amended if necessary in the light of changing circumstances.

The results were presented as follows:

Table28: Rating of Staff and Students on the development and review of the mission

Development and Review of the Mission Staff (20) Students (37) 17% 22% Strongly agree 45% 33% Agree True to some extent 33% 28% Disagree 1% 9% Strongly disagree 0% 8%



Figure 4: Staff and students response to the statement "Development and

Review of the Mission".

Remarks:

It is noted that about 60% of the faculty staff in mathematics department and students believe that the mission of the program has been put through consultative processes, with the need for formal adoption by the relevant authority within the institution.

1-4 Use Made of the Mission Statement

The Mission Statement, together with the Program Objectives, consolidates the Department's Vision to become an educational leader offering excellent services. As pointed out before, the aspects of using the Mission Statement are different, classified in three main areas: education, research and Community service. The department council issued many decisions supporting the implementation of the College's strategic plan and its initiatives that was initially driven from the mission statement.

Questionnaire was conducted on a group of faculty staff in mathematics department and students about: The mission statement is used as a basis for a strategic plan for developing the program over a medium term planning period.

The results were presented as follows:

Table29: Rating of Staff and Students on the use made of the Mission

Use Made of the Mission Statement		
	Staff (20)	Students (37)
Strongly agree	29%	15%
Agree	55%	38%
True to some extent	15%	33%
Disagree	1%	10%
Strongly disagree	0%	4%



Figure 5: Staff and students response to the statement "Use made of the

Mission".

Remarks:

It is noted that about 84% of faculty staff in mathematics department believe that the mission statement is used as a basis for a strategic plan for development of the program over a medium term planning period, while 53% of the students do so. This discrepancy is between the ratio of faculty staff at Department of Mathematics and students is up to the presence among members who are working in the decision-making circles rather than the students.

1.5 Relationship between Mission, Goals and Objectives

The mission of Department of Mathematics, which offers Bachelor's, Master's and doctorate degrees coincide with its goals and objectives. It aims to develop students who are socially committed, who take responsibility for their own learning, who appreciate culture, critical thought, communication skills and the use of technology, and who seek their own continuous personal and professional development. Transforming the mission statement into the previous goals has impacted directly on Departmental operations as,

through the formal strategic process, planning must align each strategic objective to goals and the goals are, in turn, used to determine which activities should be emphasized.

Questionnaire was conducted on a group of faculty staff in mathematics department and students about: Goals are stated with sufficient clarity to effectively guide planning and decision-making in ways that are consistent with the mission.

The results were presented as follows:

Table30: Rating of Staff and Students on the relationship between mission,

goals and objectives

Relationship Between Mission, Goals and Objectives		
	Staff (20)	Students (37)
Strongly agree	13%	22%
Agree	61%	40%
True to some extent	24%	22%
Disagree	1%	11%
Strongly disagree	1%	5%



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Figure 6: Staff and students response about "Relationship between Mission,

Goals and Objectives".

Remarks:

It is noted that 74% of faculty staff in mathematics department believe that the mission of the program is used to guide the development of program goals, objectives and strategic plans to develop it, while 66% of the students do so. This discrepancy between the ratios of faculty staff in mathematics department and students due to lack of involvement of students in such practices.

According to the previous remarks, it is important to consider the following strength and weakness points for this standard. Accordingly to other questionnaire was conducted on a group of faculty staff in mathematics department and students about the following elements:

- Faculty staff in mathematics department and students they know the vision, mission and objectives.
- Must be modifying the vision, mission, and objectives of the program.
- Faculty staff must be involved in setting the mission, and objectives of the program.
- There is a harmony between faculty staff daily activities and the vision, mission, and objectives of the program.
- The mission guides must be influenced to faculty staff daily activities.

The following are the opinions of a group of faculty staff in mathematics department and students about the previous points.

1.6 Question: Do you know the vision, mission, and objectives of the

program?

Questionnaire was conducted on a group of faculty staff in mathematics department and students about: knowing the vision, mission, and objectives of the college.

The results were presented as follows:

Table31: Rating of Staff and Students on their awareness of vision, mission

and objectives

Awareness of the vision, mission and objectives		
	Staff (20)	Students
		(37)
Strongly agree	15%	40%
Agree	40%	22%
True to some extent	45%	19%
Disagree	0%	16%
Strongly disagree	0%	3%



Figure 7: Staff & students response about "I know the vision, mission, and objectives of the program".

Remarks:

It is noted that 55% of faculty staff at Department Mathematics are aware of the vision, mission and goals of the program / college, while still 62% of the students do it, which indicates that students are more aware of the vision and mission of the program rather than staff.

1.7 The vision, mission, and objectives of the program need to

reformulation.

Questionnaire was conducted on a group of faculty staff in mathematics department and students about: The vision, mission, and objectives of the program need to reformulation.

The results were presented as follows:

Table32: Rating of Staff and Students on the reformulation of the vision,

mission and objectives

Reformulation of the program mission		
		Students
	(20)	(37)
Strongly agree	70%	27%
Agree	15%	43%
True to some extent	15%	14%
Disagree	0%	11%
Strongly disagree	0%	5%



Figure 8: Staff and students response about "Reformulation of the program

mission".

Remarks: It is noted that 85% of faculty staff in mathematics department feel the need to reformulate the vision, mission and objectives of the program, while 70% of the students feel the same.

1.8 Question: Are you involved in setting the mission and vision of the

program?

Questionnaire was conducted on a group of faculty staff in mathematics department and students about: Participation of faculty members and students in setting the vision, mission, and objectives of the college.

The results were presented as follows:

Table33: Rating and sharing of Staff & Students of the vision, mission and

objectives

Sharing of staff and students in setting the vision and mission of the program	Staff (20)	Students (37)
Strongly agree	40%	19%
Agree	40%	46%
True to some extent	15%	21%
Disagree	5%	3%
Strongly disagree	0%	11%



Figure 9: Staff & students response about "I am involved in setting the

mission and vision".

Remarks:

It is noted that 80% of faculty staff in mathematics department are interested in participating in the reformulation of the vision, mission and objectives of the mathematics program while 65% of the students feel the same.

1.9 A harmony between mission of the program and daily activities of staff

and students

Questionnaire was conducted on a group of faculty staff in mathematics department and students about: There is a harmony between the mission of the program and the daily activities of staff and students.

The results were presented as follows:

Table34: Rating of Staff and Students on the harmony between mission and

their daily activities

A harmony between mission and daily activities of staff and		
students	Staff (20)	Students
		(37)
Strongly agree	10%	19%
Agree	30%	30%
True to some extent	60%	38%
Disagree	0%	11%
Strongly disagree	0%	2%



Figure 10: Staff & students response about "There is a harmony between

mission and daily activities".

Remarks:

There is a harmony and interaction between the vision, mission and goals of the program and daily activities of the faculty staff and students.

1-10. The mission guides must be influenced to faculty staff daily activities.

Questionnaire was conducted on a group of faculty staff in mathematics department and students about: The mission guides must be influenced to faculty staff daily activities.

The results were presented as follows:

Table35: Rating of Staff and Students on their daily activities guided by the

mission

Mission guiding daily activities		
	Staff (20)	Students (37)
Strongly agree	5%	24%
Agree	35%	30%
True to some extent	55%	27%
Disagree	5%	19%
Strongly disagree	0%	0%



Figure 11: Staff and students response about "Mission guiding daily

activities".

Remarks:

It is noted that students are taking into account the vision, mission and goals of the program and their daily duties rather than faculty staff.

According to the previous results, we have the following results:

Strengths:

- The vision, mission, and values of the program are clear.
- The mission statement is consistent with the college mission statement.
- The mission is aligned with the university mission.
- The objectives of the program are compatible with the mission statement of the program.
- The mission is consistent with the Islamic believes and values.
- The mission guides more the daily activities of staff and students.
- There is a commitment of the department to achieve the mission goals.
- The mission has been the basis of a full strategic and operational plan.
- The activities in the program including course spec, course run, field experience and role of teaching and other staff reflects the stated program mission and objectives

Areas requiring improvement

- Still some department faculty staff members are not aware the role of the program mission.
- The students experience regarding the program mission still needs continuous efforts.
- Students and Stakeholders should be involved more in developing and reviewing the mission statement in the future.
- The utilization of undergraduate students in promoting program vision, mission and objectives.

Priorities for action

- Dissemination of the mission and goals of the program by all means.
- Reformulation of the mission and the objectives of the program.
- Inviting employers to participate actively in the reformulation of the mission.
- Communicate with alumni and follow-up to see what they face in the job market.
- Utilization of students and department alumni in promoting the program vision and mission.

Key Performance Indicators:

- 1- Staff satisfaction survey.
- 2- Students satisfaction survey.

Standard 2: Program Administration

(Overall Rating: ****)

Program administration must provide effective leadership and reflect an appropriate balance between accountability to senior management and the governing board of the institution within which the program is offered, and flexibility to meet the specific requirements of the program concerned. Planning processes must involve stakeholders (eg. students, professional bodies and faculty) in establishing goals and objectives and reviewing and responding to results achieved. If a program is offered in sections for male and female students resources for the program must be comparable in both sections and there must be effective communication between them and equitable involvement in planning processes. The quality of delivery of courses and the program as a whole must be regularly monitored with adjustments made promptly in response to this feedback and developments in the external environment affecting the program.

1. Explanatory note about program administration arrangements.

The program administration starts at the level of Board of college which carries the responsibilities, has the legal authority, and includes the department heads. The Dean has the responsibility of handling administration cycle inside the college and departments. The covering laws and rules are all stated in the higher education laws manual.

The department is led by the head of the department and usually the program is chaired by a well-qualified senior member of faculty who usually has a good experience in administration. He is supported by the 3 departmental assigned committees as in the internal Quality Management system, and other committees when needed, which are dealing with different matters of administration and academic issues.

The assignment of these committees aims to involve all faculty members in running the department and share them in the decision-making process. These committees are dealing with different matters of administration and academic issues (e.g. teaching load, staff

promotion, postgraduate and research Affairs, Society affairs, Laboratories and equipment's facilities, Quality Assurance and Accreditation). Different members of the committees look at the matters in their domain and see if the program is working effectively and report the shortcomings and advice on methods of improvement to the staff council. These matters are then looked into and appropriate steps taken. Quality Management system shows the responsibilities of each committee.

In addition, there is a program coordinator who assigned by the Department council and is responsible to coordinate and facilitate the teaching and learning matters of Mathematics Program. The standard criteria for choosing the coordinator are based mainly on being an acting staff with good reputation and experience in the quality assurance and accreditation field.

The program coordinator represent the program and the department in the college Quality Assurance unit, and he is responsible for coordination between the department and the Quality Assurance unit and Faculty administration in developing and implementation of quality strategy, follow up how the mission and objective of the program are achieved and supervising the preparation of the annual self-evaluation report.

According to Quality Management System approved by the College council, the head of the department and the Steering Committee carry the responsibility to perform the following:

- Interviewing samples of faculty members and employees.
- Examining the records and reports for related events and committees, the Colleges Annual Report 2012- 2013 and job descriptions.
- Examining University and College Strategic Plan.
- Examining samples of documents from departments (committee minutes, decisions, missions and goals, plans, etc.) and data available at the college website.
- Completing self-evaluation scales based on results of indicators and information available, and identifying strengths, weaknesses, and priorities for improvement.

- Referring to the report and suggested action plan of the external reviewers, and responding to their recommendations.
- Writing a first draft of SSR
- Discussing the drafted of the SSR in the department meeting, modifying it as required and approves the last version.

Use of evidence

- 1) Administrative organizational charts.
- 2) Job description of administrative personnel.
- Policies, by-laws, rules and regulations of different sectors/situations which are available on the University/College websites.
- 4) CV's of senior management personnel available at the University websites.
- 5) Annual Institutional report of achievements in administration, teaching, research and community service.
- Surveys conducted to record views and good practice in governance and administration.
- Documents of the Skills Development Deanship showing workshops for senior managers and number of managers attending the events.
- 8) The extent to which objectives set in annual operating plans are achieved.

Key Performance Indicators considered

- Number of professional development activities attended by leadership and management.
- The average ratings of staff to the following questions in staff satisfaction survey
 - i. The administration is understanding and cooperative.
 - ii. I can easily reach the administration.
 - iii. The head of my department is understanding and cooperative.

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iv. I can easily reach the head of my department.

2. Report on subsections of the standard

Refer to evidence obtained about the subsections of the standard and provide a report including a summary of particular strengths, areas requiring improvement, and priorities for action

2.1 Leadership

Formal appointment procedures, through nomination, have been initiated by the University Rector for Deans and heads of department, a procedure to delegate authority at all levels of has been approved, and management responsibilities, which are listed in a detailed guidebook, are clear to all Deans and heads of department (Annex G2.2.1: Policy of Deans' and Department chairmen Nomination Committee).

The new appointment policy involves the following: the Head of the Department of Mathematics is nominated by the Department's Council; acting on the Council's authority, the Head of the Department has responsibility for the educational, financial and administrative activities of the Department and also ensures that the Department's functions take place according to policies and regulations established by Majmaah University, College of Science and Department of Mathematics (Annex G2.2.2: Job descriptions and duties of the Dean, Vice deans and Head of the department). The Department's needs and concerns are passed on to the Council by the Head while the Chair provides facilitates Program and curriculum planning, as well as monitoring quality.

The Council is the lead in the governing board of the Department and comprises faculty members and the Head of the Department; it makes sure that the Head has the decision-making authority required to lead the Department in achieving its mission and was instrumental in the Department functioning smoothly during the two-year transition period between Heads of the Department. It has responsibility for making key decisions on issues put before it by standing committees, changes in policy, specific student-based issues, and

business related to the academic running of the Department. The Chair is responsible for leading on and managing all matters relating to the Program with the help of the standing committees; a description of the duties and responsibilities of each committee are clear but the Head of the Department can form other, ad hoc committees as necessary to deal with temporary matters of nature. Various issues can be delegated by the Chair to the relevant standing committee which meets and then takes action or makes recommendations, which are discussed in the Council; these are reported to the Dean and the College Board for approval.

The Department's Council meets at least twice a month. However, if there is an urgent problem, a special meeting is arranged. The Council discusses and resolves matters brought to its attention and procedures, such as reporting systems, valuation and review processes, and appeal and grievance procedures, exist to ensure internal accountability.

The Department of Mathematics attempts to involve all faculty members in the Department's governance and the most important mechanisms to ensure this happens are the Department Council and departmental committees . It is planned to extend this shared governance to include external communities which will be charged with identifying important issues, especially in terms of opportunities and threats. The Department Advisory Board and the Alumni Board constitute mechanisms which allow the involvement of external communities.

A survey was conducted at the beginning of the academic year 1433/1434H to measure faculty members' satisfaction. Results as shown on Figure 13 and figure 14, that the majority of faculty members with a mean of 93% stated that they can easily reach the head of the department, and believe that the head of the department is understanding and cooperative. Furthermore, the data analysis show that most faculty with mean 100% that they can easily reach the administration.

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Table 25: Permanent help and support

Strongly agree	Agree	True for some extent	Disagree	Strongly disagree
10%	45%	32%	6%	7%



Figure 12: Permanent help and support

Table 26: permanent and easy communication with the program management

Strongly agree	Agree	True for some extent	Disagree	Strongly disagree
28%	56%	14%	2%	0%



Figure 13 : Permanent and easy communication with the program

management

2.2 Planning Processes

The Mathematics program is intensively involved in determining and improving the effectiveness of its educational and service efforts at all levels. These efforts begin with an annual planning process, including specific completion deadlines. They also include program-wide and divisional planning goals based on the mission of the program. The strategic plan of College, which is the basis of planning in all programs, has been formulated with the wide consultation and participation of all stakeholders (Annex G : Strategic Plan of the College).

Objectives of the Department of Mathematics

- 1- To graduate qualified personnel capable of meeting the challenges posed by the extensive development witnessed by the Kingdom.
- 2- To attract mathematically talented candidates for teaching and research positions, and to prepare them for Faculty posts in the universities of the Kingdom.
- 3- To provide courses required by other scientific programs and colleges at Majmaah University.

- 4- To encourage research programs and participation in specialized scientific conferences.
- 5- To offer classes and workshops for the various sectors requiring mathematical training, and to provide consultations to research centers and institutions.

Quality Evaluation of Program Administration.

Summary of strengths:

1 Decisions concerning the program aspects are first taken in the Department Council and documented in the meeting of minutes.

2 Planning for the delivery of the program at the beginning of every academic year and establishing the required committees.

3 Decisions taken by the Department Committees on procedural issues are used as a reference for decisions of similar cases in the future.

4Course registration and students grades submission are accomplished electronically through the education system.

Areas for improvement:

1- The administrative supporting staff is not enough. The number of the supporting staff should be proportional to the duties of the department and its size.

2 The terms of reference for all committees and administrative staff should be written and clearly specified.

Priorities for action:

1- Requesting more positions for administrative staff.

2- Improving all facilities and potentials.

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Standard 3: Quality Management and Improvement

(Overall rating: ****)

Teaching and other staff involved in the program are committed to improving both their own performance and the quality of the program as a whole. Regular valuations of quality must be undertaken within each course based on valid evidence and appropriate benchmarks, and plans for improvement made and implemented. Central importance must be attached to student learning out comes with each course contributing to the achievement to overall of the program objectives.

The Quality Assurance is a process of evaluation and following-up the quality of performance in all aspects of the program, such as inputs, processes and outcomes. The desired levels of quality maintaining and approving ensure stakeholders that the quality in the program is being maintained and defined as a quality management system which complies with standards of good practice within the concept of appropriateness of the mission and objectives of the program.

The quality management system at the College of Science is based on two pillars:

1- The first pillar is the Internal Quality Assurance Management based on the applied Standards for Quality Assurance and Accreditation of Higher Education Institutions and Standards for Quality Assurance and Accreditation of Higher Education Programs.

3- The second pillar is the National Qualification Framework for Higher Education.

Internal Quality Assurance Management

The program Internal Quality Assurance Management is achieved through:

- 1. Reviewing the program internally and externally.
- 2. Conducting students' evaluation for all courses, as well as all monitoring its results.
- 3. Conducting Academic Teaching Staff evaluation on semester bases.

4. Conducting graduation surveys on annual bases.

5. Getting employer feedback in annual bases.

6. Conducting alumni surveys and monitoring the results.

7. All the results of the above surveys reviewed and discussed at the levels of Vice Dean for Quality and Development and program, and its improvement is monitored on annual bases.

Quality assurance Management Committee was established and developed by the Department of mathematics to continuously support the University's vision improvement of its programs and the academic and administrative units for institutional accreditation.

Informing the Committee assessed the compliance of the requirements of the third standard of the national assessment and accreditation NCAAA. Concerning the management and development of quality assurance the Commission will make the following:

1. Evaluation of the documents and evidence of quality assurance and development.

2. Make a proposal of unfinished requirements plan.

3. Submit a report to assess of the standard requirements.

The Unit tasks

The core tasks of the Committee are:

- 1. Determine the nature and sources of information.
- 2. Inventory of components, measurement instruments and associated subsidiary criteria.
- 3. Preparation of action plan to achieve the objectives referred to above.
- 4. Design and collect information forms from different sources.

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5. Check the practice field which relates to the third standard requirements.

6. Collect the information from Responsible authorities and analysis.

7. Introduce the evidence of finished requirements.

8. Restriction on the unfinished requirements.

9. Introduce the Plan process which enables the University to finish the requirements.

10. Preparation of the reports.

11. Follow-up the implementation of the recommendations of unfinished requirements and collect the evidence.

Contact officials and information sources

1. The senior managements of the University.

2. The Deans of faculties.

3. Heads of departments.

4. Deans of deanships and specialized centers.

5. Managers and staff.

6. Faculty members.

7. Quality faculties units.

8. Students.

The nature of the data and information

The Commission gathers information and documents for assessing response to quality management standards.

Methods and tools to collect data and information:

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This will be done through

- 1. Interviews
- 2. Questionnaires
- 3. Collection of reports

The basic components of the third standard:

- 1. Commitment to quality improvement in our program.
- 2. The scope of quality assurance processes.
- 3. Manage the quality assurance processes.
- 4. Using of indicators performance and Comparison between reference points.
- 5. Independent verification of the estimation.

The preliminary report of the standard:

First: Commitment to quality improvement in our program.

The Vice Dean for Quality and Development is considered a backbone and mainly responsible for carrying out and running the quality management system via quality and development Unit.

The continuous improvements and quality management at the college are run by the entire program's coordinator with the collaboration of all staff members' at all different levels of college/program. Its quality processes and procedures are implemented by integrating and using NCAAA Internal Quality Assurance Arrangements.

The Quality improvement and quality management are carried out by the guidance of the Dean and the Vice Dean for Quality and development during the preparation of programs documents.

This guidance leads to increase the awareness of the quality measures which is created within all program levels and linked to qualification titles to describe the increasing intellectual demand and complexity of learning estimated or expected as graduates performance progress.

The quality awareness leads to synchronize stages during the preparation of all documentation of the program.

In this report, the weakness points which need to be improved are as follows:

1. Evaluating how to encourage innovations and creations by University units.

2. Examining the reasons for the shortcomings, determining the mistakes, identifying responsibilities and how to lay the Foundation and plans to prevent.

3. Involving all members of the Faculty and staff in the assessment process, cooperating in the preparation of reports and improving the performance of their activities.

4. Evaluating and planning of improvement through special processes.

A questionnaire for the improvement of these elements took part in the survey of faculty with the numbering section and the results were as follows:

Table 27: Commitment to quality improvement in our program.

	Percent%								
	Strongly agree	agree	True for some extent	disagree	Strongly disagree				
1	%27	%36	%18	%14	%5				
2	%32	%32	%23	%9	%5				
3	%27	%32	%23	%14	%5				
4	%32	%27	%14	%23	%5				
Total	29.5 %	31%	19.5 %	15 %	5 %				



Figure 14: Commitment to quality improvement in our program.

We notice from previous results:

1. The Committee felt that there was a large effort from the College Administration which is represented by the Dean and Vice Dean for quality to improve the quality of the College through a rigorous program of continuous improvements and innovations.

2. The Committee felt that all faculty members are involved in the processes of selfevaluation, and cooperate in reporting the improved performance in activities.

3. There is inability of some staff in understanding the meaning of quality and the benefits for the college and students and the improving of the educational process to prepare graduates who are able to the Advancement of society.

Therefore, the Commission recommends that sessions be made to clarify the concept of quality and relevance.

The Second: the scope of quality assurance processes

At the level of the college, commitment has been initiated for continuing improvement in the performance of its activities, and maintains the program Mission and Objectives looking after the social demands and needs. The college Initiated the Quality Management System model to evaluate and improve the quality performance at the program.

In the report, and due to the thourugh studying of the weaknesses needed to be improved, it is recommended that:

1. Quality assurance operations must cover all aspects of planning program and implementation, including activities and resources offered by other departments in the institution.

2. Quality assessment processes must give an overview of the quality aspects in the program as a whole and in each of its components (including all scheduled courses)

3. Operations to ensure quality performance of all activities, routines and strategic goals.

4. Ensure quality assurance processes interpolation the standards required, and ensure that there is a continuous improvement of performance.

A questionnaire for the improvement of these elements took part in the survey of faculty with the section numbering and the results were as follows:

	Percentage %						
	Stronglyagree	agree	True for some extent	disagree	Strongly disagree		
1	%23	% 36	%18	%14	%5		
2	%27	%36	%18	%14	%5		
3	%23	%36	%23	%14	%5		
4	%32	%27	%23	%14	%5		
AVERAGE	26.250%	34.250%	20.500%	14.000%	5.000%		

Table 28: Quality assurance processes



Figure 15: Quality assurance processes

We notice from the previous results:

1. The Committee considered that quality evaluation processes gives an overview of aspects of quality in our program.

2. The Committee remarked that quality assurance processes ensure the required standards.

The third: Quality assurance processes management

Various mechanisms are used to ensure quality in all areas of the Department. These mechanisms enable and ensure the involvement of students and other stakeholders in the quality system. Students are encouraged to provide feedback on the quality of teaching and learning through students' surveys. The Department identifies the core knowledge competencies and skills that Mathematics graduates should master. These core knowledge

outcomes developed in all required courses, and specified the core skill outcomes across the curriculum. This process continues with the development of teaching-and-learning strategies best suited to assist students in attaining the learning outcomes. These strategies are implemented by faculty members in Program courses. Observations of Peers through classroom visits are considered as a good practice of quality assurance.

In the report, the weakness points which need to be improved are:

1. Storing the statistical data for indicators involving the distribution of grades, progress and completion rates in a central database, which can be accessed and reviewed regularly, are set out in the annual and of periodic program reports.

2. One of the faculty members in the program is responsible for leading and supporting the quality assurance processes management and involves teaching staff and other staff in the quality assurance activities.

3. Putting quality assurance program procedures for improvement and exclude unnecessary requirements as part of this review to simplify the system and avoid any unnecessary thing. A questionnaire for the improvement of these elements took part in the survey of faculty with the section numbering and the results were as follows:

	Percentage %							
	Stronglyagree	agree	True for some extent	disagree	Strongly disagree			
1	%14	%18.68	%27	%36	%9			
2	%14	%16.34	%14	%36	%14			
3	%23	%23	%14	%32	%9			
total	17%	19.34%	18.33%	34.66%	10.67%			

Table 29: Quality assurance processes management


Figure 16: Quality assurance processes management

We infer notice previous results:

1. Statistical data for the indicators are not saved in the database.

2. One of the faculty members in the program is responsible for leading and supporting the quality assurance management processes, involving faculty and there is no activity for employees in quality assurance activities.

3. Putting quality assurance program procedures for improvement but not regularly, excluding unnecessary requirements as part of this review to simplify the system and avoid any unnecessary ones.

The fourth: using of performance indicators and reference points In the report, when studying the weaknesses which need to be improved, we get that:

1. It Is regularly to provide information about the basic performance indicators required by the educational institution

2. To Select performance indicators (criteria) and additional reference to the comparison of program used in evaluation and reporting.

3. Standardized wording and form of indicators (criteria) of Compare reference which used in the program and throughout the institution.

A questionnaire for the improvement of these elements took part in the survey of faculty with the section numbering and the results were as follows:

Table 30: using of performance indicators and reference points

	Percentage %								
	Strongly agree	agree	True for some extent	disagree	Strongly disagree				
1	%31.22	%23	%23	%18	%5				
2	%27	%18	%18	%23	%14				
3	%27	%27	%23	%18	%5				
Total	28.34	22.66	21.33%	19.67%	8.00%				



Figure 17 : Using of performance indicators and reference points

We notice from previous results:

1. Most of those who participated in the survey felt that the department provides information about the basic performance indictors needed.

2. Selected performance indicators (criteria) and additional reference comparison program which used to evaluation and reporting.

3. Most of those who participated in the survey felt that the wording and format indicators (criteria) used in our equivalent program in all parts of the educational institution.

The fifth: Independent verification of the evaluation:

In this report, the points of weakness which needed to be improved are:

1. Self-evaluation processes depend on multiple sources of evidence, including feedback through surveys of users and (stakeholders) such as students, faculty and staff, alumni, employment (for graduates of the program).

2. The explanations are validated evidence for quality by independent advice from persons who are familiar with the type of activity concerned and impartial mechanisms are used to remove the incompatibility between the different views.

3. Checking levels (standards) of the students learning outcomes compared to the requirements of "national qualifications framework" and the levels achieved in similar programs in educational institutions.

Table 31:	Independent	verification	of the	evaluation
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	Percentage %							
	Strongly agree	agree	True for some extent	disagree	Strongly disagree			
1	%25.98	%27	%18	%14	%14			
2	%18	%18	%23	%27	%14			
3	%23	%23	%27	%23	%5			
Total	22.33%	22.67%	22.67%	21.33%	11.00%			



Figure 18 : Independent verification of the evaluation

We notice from previous results:

1. Most of those who participated in the survey felt that the processes of self-evaluation of the quality of performance depends on multiple sources of evidence, including feedback through surveys of users and beneficiaries (stakeholders) such as students, faculty and staff, alumni, employment (for graduates of the program).

2. Most of the participants in the questionnaire validated evidence interpretations of quality by independent advice from persons who are familiar with the type of activity concerned and impartial mechanisms are used to remove the incompatibility between the different views.

3. Most of those who participated in the survey see verified standards of the students learning outcomes of students compared to the requirements of "national qualifications framework" and the levels achieved in similar programs in educational institutions.

Key Performance Indicators involved:

The following key performance indicators are used for the purpose of assessing performance to verify quality interpretations:

- Proportion of the courses in which student evaluations were conducted during a year time.
- 2. Proportion of the course reports conducted within a year time.

Program Strength:

1. A commitment to quality improvement is strongly created within all program level that leads up to increase the quality awareness and the understanding of the program's documentation needs.

2. Course and programs' reports are regularly submitted.

3. Program courses, staff evaluation surveys, Peer to Peer observations are regularly conducted.

4. The quality performance and improvement is checked against the related evidences, and using surveys feedback, and opinion of Stakeholders', graduates'', staff members, and employers.

5. Improvement has been noticed and seen via the program courses documentations that are resulted via quality improvements and due to different monitoring reports as considered to quality closing loop cycles.

6. The NCAAA is given as continuous improvement. Meanwhile the use of Majmaah University will give the opportunity to have a continuous improvement as soon as the University Quality Deanship finalizes its documentations.

7. Quality improvement plans were synchronized and developed together with KPIs and benchmarks.

Areas for improvement

1- Quality improvement at Mathematics Department should be integrated into all academic and administrative processes

2- All data analysis should be made and used as the basis for continuous improvements for Mathematics department.

3- Action plans should be produced based on performance analysis.

Priorities for action

Plan for quality improvement to be integrated into all academic and administrative processes.

Standard 4. Learning and Teaching.

(Overall Rating :***)

The "National Qualifications Framework" and the requirements of the labor market and learning standards should be evaluated and verified through processes and appropriate benchmarks. To meet relevant external benchmarks, there must be a rehabilitation of teaching staff and providing them with adequate expertise to carry out their responsibilities by using different teaching strategies. Student learning outcomes must be clearly specified, consistent with the National Qualifications Framework and requirements for employment or professional practice. Standards of learning must be assessed and verified through appropriate processes and benchmarked against demanding and relevant external reference points. Teaching staff must be appropriately qualified and experienced for their particular teaching responsibilities, using suitable teaching strategies for different kinds of learning outcomes and participating in activities to improve their teaching effectiveness. Teaching quality and the effectiveness of programs must be evaluated through graduate student assessments and employer surveys with evidence from these sources used as a basis for plans for improvement.

The learning outcomes of students in line with types of learning outcomes must be clearly defined, and their involvement in activities aimed at developing effective education. It must be done to assess the quality of teaching and the effectiveness of programs through student's evaluation, graduates and employers using opinion polls and the conclusion of evidence from such sources as the basis for the development plans.

The standard of teaching and learning is the most important criteria in any self-assessment program and should include the information provided on the indicators used as evidence on performance and also include the priorities and development strategies. It should be noted that the results of the processes followed, For example: If whatever steps have been taken to

ascertain the student achievement level in comparison with standards appropriate external reference. What are those steps and what are the results that have been accessed? There is no need to repeat the information contained in the reports and opinion polls or private investigation or in the annual reports of the program.

Explanatory notes about the processes should be included in each section below followed or regulatory action relating to the following sections:

Description of the verification process of preparing a report on the standards of teaching and learning (Can provide more information in the subsections below, if necessary).

Has the verification process through:

1-conducting a questionnaires at the level of faculty members and students in the college

2-A copy of the quality speech of you before the university quality committee.

3- Description of the program and all courses and the presence of quality office of the department.

4-Attach a complete sample of the results of the students.

5-Compiling programs from universities that have been corresponding on the basis of the work plan for the division, as well as, some emails from the head of the department's work plan and comparing the corresponding universities.

Key Performance Indicators:

1) Ratio of students to teaching staff.

2) The overall rating on the quality of their courses from their response to the statement "I feel completely satisfied with the quality of this course" in the course evaluation survey3) Proportion of teaching staff with verified doctoral qualifications.

4) Percentage of students entering programs who successfully complete first year.

5) Some of students entering undergraduate program who complete it in the minimum time.
6) The overall rating of the students on the quality of the Program on response to the statement "I am generally satisfied with the level of quality of educational experience at this University" in the Program survey evaluation.

7) The overall rating of the students on the quality of the program on response to the statement "I have received a suitable guidance during my study in the Program" in the Program evaluation survey.

8) The overall rating of the employers response on the statement "By and large, we are satisfied with the graduates of the program".

- A copy ads of quality Deanship and a copy of the recording faculty member of various courses.
- 2- The preparatory year department gives 20 hours of English in the first semester as well as16-hours of English language in the second semester and the new facility preparatory plan for the year1433/1434, as well; the evening program is open to students of Computer Science Department.
- 3- Attached is a copy of a site on the university students' personal file.
- 4- File attachment by the students' names, grades, cumulative phones and the remaining hours
- 5- A copy of the file description of courses from the site of the department at university.
- 6- All courses reported by the Office of Quality department.
- 7- The University must participate in the provision of Arabia digital library and image attachment to the library from within a Members page.
- 8- The Quality Assurance Unit must register the names of all faculty members involved in the courses each semester.
- **9-** The development plan department and the old facility plan and the new plan, which is under arbitration this year.

10- Minimum qualifications for all faculty members with a higher degree of studying the level at which it can be seen that the files Members of the Deanship of Faculty Affairs as documented by the assets of the certificates of the Saudi Consulate.

11- There are no faculty members working part-time as all faculty members working as fulltimer.

12- Analyzing the data for Department of Mathematics.

13- A set of evaluation of academic counseling has been done by a group of graduates.Subsection4.1studentlearning outcomes (**)

Characterization procedures to ensure appropriate and adequate learning outcomes of students of the desired program.

Writing procedures to ensure harmony with the requirements of the desired career or profession as defined by the recommendations of the experts or conditions or professional bodies or the relevant accreditation bodies with "National Qualifications Framework" The report should include the results of Procedures, and not just the outcome of whether or not you may have followed.

The Study Plan Committee in the Department reviews the study plan from time to time. The recommendations of the committee, which takes in consideration the comments of the students and the employers as well as those of the teaching staff, are discussed in the Department Council to formulate and approve any changes in the study plan. Then a recommendation with the proposed changes is forwarded to the Vice dean of academic affairs to complete the approval procedures in the College and then at the University.

(Note: The evidence on the level of student performance within the desired learning outcomes, must be seen in the sub-section4.4below)

<u>Assessment of students' learning outcomes pointing to the evidence on the appropriate and</u> adequacy of students' learning outcomes desired from this program, and presented a report

containing a summary of the strengths and areas requiring development, and implementation priorities.

The National Commission for Academic Accreditation & Assessment identifies in five domains of learning (Knowledge, Cognitive Skills, Interpersonal skills & responsibility, Analytic & Communication skills and Psychomotor Skills). The National Qualification Framework stipulates that graduates at higher educational institutions in KSA are expected to demonstrate a range of attributes such as:

1) Taking initiative in identifying and resolving problems and issues both at the individual and group levels, exercising leadership in pursuit of innovative and practical solutions.

2) Applying the theoretical insights and methods of inquiry from their field of study in considering issues and problems in other contexts.

3) Recognizing the provisional nature of knowledge in their field and take this into account in investigating and proposing solutions to academic or professional issues and Students' learning outcomes are clearly specified.

Since some of the learning outcomes are not entirely dependent on the programs, and given the relatively poor outcome from Saudi high school system Majmaah University has initiated in 2012 the Preparatory Year (Prep Year) program that aims at:

1- Instilling in students the principles of self-discipline, commitment and responsibility.

2- Enhancing students 'self-confidence, leadership skills and initiative.

3- Developing students' skills in English, Information Technology, and Mathematics, as well as communication, learning, thinking, and research skills.

4- Encouraging innovation, creativity and self-development.

5- Preparing students to excel academically and to maximize their involvement in University life.

Improving students' learning achievements to enable them to compete for winning jobs.

The overall learning outcome is measured by the continual student's assessment, quizzes, tutorial participation, and presentations delivery, active participation during classes, small group discussions midterm exams and final exams. Although all courses have goals and objectives included in block manuals, the achievement of these goals is assessed through a vigorous evaluation process. To ensure that we are teaching the appropriate knowledge, skills, and attitudes, the following are currently being applied and there are some in the process of implementation:

1) Individual course objectives and intended learning outcomes are defined for all courses and are made known to all students.

2) Adequate training is in place for all staff involved in assessment to improve their skills and attitudes towards excellence in the assessment system.

 The Department has recently formed a special committee (development and quality Committee) for program evaluation.

This normally carried out at the end of each semester. It aims to measure satisfaction and performance with teaching from the students' perspective. All courses, taught in the first and second semesters in 1433-1434 H, are evaluated electronically through the University educate system. Each instructor can access the results of these surveys for his courses via the University website.

The College of Science firmly acknowledges the importance of using teaching methods and practices which will allow students to develop their reasoning skills and so it has called upon all academic departments to use methods that will encourage students to expand their knowledge and then to apply what they have learned in a logical and questioning manner. Students, therefore, must be seen as partners in the processes of learning and teaching; they

must take on the role of the instructor at times and must learn how to search for information, make decisions regarding how this information can be sued, and reconstruct results accordingly. Thus, the faculty role is not to cram students' heads with information, but to teach students how to search for information,

follow up their progress, and help them to organize their own thinking.

The Mathematics Program includes a course that attempts to improve the critical thinking skills of research students in such a way that enables them to project what they have studied in theory in order to promote scientific criticism in research. This course is MATH499 (Research Project). Each student chooses a faculty member to supervise his project and they meet regularly 3 hours per week to discuss the student's performance in his project. At the end of the semester the student have to present and defend this project before an examining committee of faculty members assigned by the Department for this purpose to evaluate this project. This has a significant effect on students' communications skills. This also proved to be most effective in motivating students to take part in discussion, in enhancing the development of thinking skills, and in raising awareness of the importance of technology in teaching.

Points of Strengths:

1-Putting programs that lead to professional qualifications of learning outcomes meet the requirements of professional practice in the Kingdom of Saudi Arabia in the fields of disciplines involved. (These include the requirements of national accreditation requirements, and take into account the requirements of the global dependence of the field of study, and any systems or Saudi Arabia regional needs)

2–Including any student characteristics determined by the educational institution for its graduates, or determined by the program to them, within the targeted learning outcomes in all relevant courses and in student activities required, and using learning strategies and the types of student assessment appropriate.

Areas need to be developed:

1-Outcomes determined (outputs) targeted learning after studying the opinion of experts, academics and professionals with the relationship.

2-consistent with the targeted learning outcomes "National Qualifications Framework" (which covers all areas of learning at the required level).

3- Using appropriate mechanisms, especially the assessment of the program-including surveys of students, graduates and graduate employment data, the views of employers and the subsequent performance of the graduates-so as to provide the evidence on the appropriate learning outcomes and the extent of the target achieved.

Implementation priorities:

1- Forming a committee of academic experts from inside and outside the university to pioneer the learning outcomes targeted.

2- Designing the questionnaires to companies, graduates and other employers.

Subsection4.2Programdevelopmentprocedures. (**)

Evaluation procedures for the development of the program Points to the evidence, and presents a report containing a summary of the points of strengths and areas requiring development, and implementation priorities.

There is a well-developed process for new program development and for major changes to existing programs. MU Council and administration are committed to maintaining the University's position at the forefront of higher education in educational programs that meet the needs of the community. For new program proposals, the faculty member should first ascertain the need and viability of the new program through consultation with colleagues and the administration. After reviewing all such proposals approved by the Curriculum Committee, then present them to the faculty for approval at a regular monthly department meeting. Moreover, the Curriculum Committee and the academic departments periodically review academic programs and courses offered at the College to determine whether they meet

Majmaah university 's requirements, and examine their current suitability to the job market. All programs are reviewed, and revise at least once every five years, if necessary.

Points of Strength

1- Plans are made to offer the program in the description and evaluation of the program, so as to include the required knowledge and skills acquired, in addition to teaching strategies and assessment methods for gradual progress in learning and in all areas of learning.

2-Plans are developed in the descriptions of courses so that it includes the required knowledge and skills acquired, in addition to teaching and assessment strategies appropriate to the areas of learning that will be the focus in every decision.

3– There is coordination between the content and strategies developed in the descriptions of courses, and are applied in fact, to ensure a gradual and effective progress of learning in all areas of learning in each program.

Implementation priorities:

- 1- Including the planning process (of the program) to take any necessary action to ensure that faculty are familiar with the strategies outlined in the program descriptions and decisions, and be able to use it.
- 2- academic fields and /or professional fields monitored, prepares students to have, an ongoing basis with making the necessary adjustments in the programs and the content of courses and in the reference prescribed to ensure the continuity and quality of harmonization.
- 3- There is a standing advisory teams in all professional programs, participating in its membership distinguished practitioners of professions and jobs related programs to continue to provide advice on program content and quality

4-The proposals of the new programs or substantial modifications to the programs evaluated are accepted or rejected by the academic committee in the upper educational institution, using Criteria to ensure that appropriate consultation detailed in the planning process and the ability to implement the program effectively.

Implementation priorities:

1- Designing and implementation of training courses in the description of courses and programs for those who are bound by an un precedented entry of faculty members.

2 - Forming a committee to follow up the academic department and professional fields worked by students.

3-Formatting of advisory teams of permanent and temporary faculty inside and outside the University following-up and counseling.

4- Putting mechanisms and strategies to ensure a clear and appropriate to ensure in-depth consultations and detailed in the acceptance or rejection of proposals and amendments.

Subsection4.3program evaluation and review processes. (Total score of1_star)

Describing the processes which is used to evaluating and reviewing the program.

Completing the verification process through the work of questionnaires on the level of faculty members and students in the college.

The primary objective of college of Science review process is to assess the quality of its programs. The program reviews are intended to improve academic programs and to demonstrate accountability to prospective students and community. The review process is designed to ensure objective and constructive assessments of the Department's and to meet the following additional objectives:

1- To foster academic excellence.

2- To determine how to raise the quality of the program.

3- To provide guidance for faculty and administrative decisions in supporting of continual future improvement.

4- To improve education delivery methods, declare program strengths, ensure the rigor of documentation.

5- To monitor the extent to which students are meeting learning outcomes.

1. To assist in future planning by clarifying academic objectives and the service provided to students.

All academic programs offered within the Majmaah University shall be subject to a comprehensive program review through a regular five years continuous program review cycle to identify program strengths and weaknesses and to identify areas for improvement. Hence, Department of mathematics follows Majmaah university programs evaluations policy and procedures. Its evaluation process aims to demonstrate how far it has achieved its objectives using the results of such review to improve its Program. For example, the need to improve students' communication skills which has been identified from surveys and meetings between students and faculty; this has now become one of Department of mathematics current objectives. Thus, students are now required to carry out oral and written presentations; they are also taught to think for themselves, and examine and solve problems, instead of being exposed to the static teaching and examination of factual knowledge. This also aimed to develop their desire to embark on life-long learning. All students in the College of Science are required to undertake a "Preparatory Year" in order to develop these skills. Evaluation in Department of mathematics is currently carried out internally and scheduling are reviewed by academic Plan Committee; this committee is responsible for organizing faculty and student surveys, analyzing the resulting data, and developing recommendations. Further feedback is sought and received using a variety of means. These include carrying out an Annual Program Review, a Program Evaluation Survey, a Course Evaluation Survey, Alumni Survey, Employer Survey and a Student Experience Survey Assessment and evaluation of Program Review Pointing to the evidence, and presenting a report containing a summary of the strengths, areas requiring development, and implementation priorities.

In addition to providing information about the quality of these processes, this should include the conclusion searched by the quality of the program as a result of the use of these processes. It should be noted that information on the indices, and the results of surveys, as required

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Strengths

1-Records are kept if the completion rates of students for all courses and for the program, and placed within the quality indicators.

2-Comparing the quality of the program indicators with those used in other programs in the institution in standards points compared to external reference occasion.

Areas need to be developed:

1-courses and programs are evaluating and report on an annual basis, these reports shall include sufficient information about the effectiveness of the strategies planned, and the extent to which the targeted learning outcomes.

2- Retaining the details of the amendments made and the reasons for it in the program files and decisions, and that's when these amendments area result of the evaluation processes.3-The development and use of quality indicators is including measures of learning outcomes and that all courses of the program as a whole.

4-Reports about the program are reviewed annually by senior officials in the senior management and by quality committees in the educational institution. 5-Taking appropriate action for the work necessary improvements when problems are detected through the processes of program evaluation.

6-A comprehensive assessment of the program is conducting once at least every five years, in addition to the annual operations rating. It should also be necessary procedures to carry out re-evaluation consistent with the policies and procedures of the institution. 7-Auditsof programs include some industrial and professional staff, in addition to faculty members with experience from other educational institutions.

8-when reviewing the program making use of the views of students and graduates about the quality of the program through opinion polls and interviews, and through discussions with the teaching staff and with the other beneficiaries (stakeholders) such as employers.

Implementation priorities:

1-Activation procedures and strategies for quality control of the quality department in college.

2-Selecting a fixed place to save the details of the amendments made and the reasons that called for the files of the program and courses.

3- Identifying indicators which include quality standards for learning outcomes for all courses of the program.

4-periodic review of reports on the program annually by senior officials in the senior management committees quality.

5- Determining appropriate procedures for the necessary work improvements upon detection of any problems during the assessment processes.

6-Anannual and comprehensive evaluation must be done at least every five years.7-Hiring of relevant professional and industrial sectors, in addition, to faculty members with experience from other educational institutions.

Subsection4.4Student Assessments. (**)

Describing the strategies to assess students in the program and the procedures used to verify the student achievement standards.

Evaluation of student assessment procedures pointing to the evidence on the effectiveness of student assessment. In addition to evaluating the processes used, there should include partial guide to check the standards of student learning outcomes, Compared to the standards of appropriate privilege. They should report this subsection that contains a summary of the strengths and areas requiring development, and implementation priorities.

To excel in the creation, application and exchange of knowledge, it is vital to improve student learning through effective assessment. Thus, the purpose of assessment in Department of mathematics is, firstly, to ensure that the Program is meeting its goals and objectives in terms of teaching and learning and, secondly, to improve the quality of future teaching and learning.

Faculty members at Department of mathematics assume responsibility for formative and summative evaluation with the goal of enhancing each student's chance of success in program accomplishment. Faculty members therefore use a range of assessment measures including quizzes, assignments, projects, student portfolios, and mid-term and final examinations in order to obtain a clear picture of what students have learned; utilizing this variety of methods also avoids the potential weaknesses of applying a single form of assessment. These results are analyzed and an on-going process of improvement implemented in terms of learning outcomes.

At the undergraduate level multiple assessment methods including direct and indirect assessments methods used to measure students' achievement. Direct assessment includes tests and examinations, portfolio evaluation. In tests and examinations approaches, which is used by most faculty members at Department of mathematics in association with cognitive goals in order to review students' achievement with regard to a general body of knowledge associated with the program. It intends to measure whether students have gained a definite process and content related knowledge. While, in portfolio evaluation, faculty member collect exam papers, (multiple choice or essay examinations) quizzes, midterms and final, samples of students' answer sheets, and the course report. These files are available in the accreditation unit in the Department.

Indirect assessments methods, on the other hand, include students' surveys, Alumni Surveying, employer surveying.

The courses are assessed within the framework of the University's regulations: (students must attain 60% in mid-term exams and other activities and 40% in the final exam). Indirect assessment, through surveys and interviews, for example, asks students to reflect on their own learning in the classroom.

Students are required to achieve a minimum Grade Point Average (GPA) of 2.0 at each level in each course (out of a possible 5.0); if they fail to achieve this level, they do not pass and must retake the course. The GPA is determined by dividing the total number of points from

all the courses the student has attended by the number of units in the student's schedule. Further to evaluate students' learning and experiences, the Department gather data by conducting a course evaluation survey, alumni surveys and a student experience survey. A student's GPA is determined by dividing the cumulative point values of all courses attempted by the number of units in the student's semester schedule.

All Department of Mathematics' faculty members submit a course syllabus at the beginning of each semester. This consists of: the course's learning objectives; a description of the course content, assignments, textbooks and reading lists; evaluation procedures and grading standards; the teaching methods that will be used; and the faculty's office hours.

This information is kept in the course file but is also given to students. At the end of every semester, all teaching staff submits copies of their tests and examinations to chairs of department, together with a course report which includes details of the course, with all entries having been updated. This report includes relevant documents such as the course outline, and samples of examination papers, assignments and/or term papers .

Points of Strengths:

1-Commensurate mechanisms assess the performance of students with learning styles required.

2-Describes the evaluation procedures for students at the beginning of the teaching of courses.

3-Make the necessary arrangements for the training of faculty in both the cortical and practical evaluation of students.

4-Given, in immediate feedback to students about their performance and the results of their assessment during each semester, and be accompanied by mechanisms to help when necessary.

5-Studentworkisevaluatedfairlyandobjectively.6-Criteria and academic grievance processes known to students and are applied in all fairness.

Areas need to be developed:

1-using appropriate mechanisms, honest and reliable verification of levels (standards) compared student achievement points (standards or levels) the relevant reference, both at the internal or external and the levels of work required to give various estimates are consistent and do not change with time, equal in courses offered at the college and the program and the institution as a whole, and identical with those of other prestigious institutions.

2-The use of matrices or by any other means is, when correcting tests and duties of students and their projects to ensure that all areas of student learning outcomes planned have been covered.

3-Including policies, procedures and business activities that can be followed to deal with cases where the levels of student achievement are inappropriate or evaluated inconsistently.4-The use of effective measures is to verify that the work already provided by the students is their own work.

Implementation priorities:

1- Determining appropriate mechanisms and honest reliable verification of levels (Standards) student achievement.

2- Determining matrices and other means which area modern use by students when correcting tests and duties and projects.

3- Developing policies and procedures that can be followed to deal with cases where the levels of student achievement is inappropriate.

4- Developing effective measures to check the students' performance of their duties personally.

Subsection4.5Educationalassistanceprovided to students. (***)

Configuring a summary of the nature of the assistance provided for the points listed in this subsection of the standard (e g, orientation programs, office hours, to determine the need and actual assistance, referrals to support services available...etc.).

The verification process has been through the work of questionnaires on the level of faculty members and students in the college.

Evaluation of educational assistance provided to students. Pointing to the evidence on the effectiveness of educational assistance provided to students in this program. (Example: Is it a help that students need already? Do you offer according to what is planned? Hosted by the students and how?). The report should include a summary of the strengths and areas requiring development, and implementation priorities.

Majmaah University has an obvious commitment to provide services necessary to support and enhance learning and to provide students with opportunities for academic success. The policies, requirements, procedures and options available in Majmaah university programs are summarized in a department undergraduate handbook that is made available to all students in all programs.

Students admitted at the University are advised on curriculum matters through orientation programs, which are conducted once at the beginning of the year/semester. In the orientation programs, representatives from each college introduce their curriculum and career opportunities. In addition, students enrolling at the University are advised on curricula and career matters through the following channels:

Student Council Committees which consists of students representing various colleges
 Deanship of Student Affairs has established students counseling and guidance units in order to:

Help students understand the dimensions of the problem and that are half the solution.
 Help students recognize their potentialities and abilities, as well as environmental resources around them and try to exploit them.

3) Solve the problems of academic achievement.

4) Solve mental and social problems that may impede academic achievement.

In an effort to increase students' success the Department of Mathematics plans to develop an early intervention program which will be designed to assist faculty in identifying and

improving the performance of students who are at risk of failing, dropping a course, or withdrawing from program. Faculty, through regular contact with students, are the first to see the effects of these problems, which manifest themselves through low test and quiz scores, failure to turn in assignments, poor class attendance, and poor class participation among other things.

Strengths:

1-Faculty present in adequate and specific agenda times to provide appropriate advice and guidance to students attending fully and partially regular

2- Sources of teaching (including the provision of staff and learning resources, equipment and training in clinics or in other field locations) is sufficient to ensure that the achievement of the targeted learning outcomes.

3-appropriate mechanisms available to prepare students to make themselves ready to study in an environment of higher education, with special attention to preparing them to adapt to the instruction language, and self-directed learning, and programs bridging (moving) required for students transferring to the institution and have the credit hours from their previous. It should not be calculated as preparatory studies within the credit hours required in the program

4-There are systems used to monitor the course load for students and coordinated through the courses.

5-Following the progress of the performance of individual students, and provide assistance and /or guidance to those facing difficulties.

6-Relayratesstudents' progress from year to year, and the rates of completion of the program successfully, and analyzes to identify groups of students who may face difficulties, and to provide them with assistance.

7-Students are given feedback about their performance, as they will be given the results of their assessment without delay, with the presence of mechanisms to provide assistance to them when needed.

8-Thefaculty sufficient knowledge of the different types of support services should be available to students in the institution, and they guide students to appropriate sources of support when needed.

9 –The adequacy of the arrangements assess necessarily to provide assistance to students on a regular basis through operations including feedback from students, but not exclusively.

Areas need to be developed

1-The effectiveness of counseling and academic guidance are evaluated through the use of tools and electronic data available, such as the analysis of the response time and the results of evaluation of students, and in the case of inclusion procedures counseling and academic guidance to students on electronic communications by e-mail or any other means.

2-Additional lessons (private) are provided for helping students to ensure their understanding and their ability to apply what they are learning.

3-The necessary actions are taken to ensure that the appropriate language skills of students, as the language of instruction in the program is English, **are enhanced**.

4-The provision of suitable facilities for the study of the individual is available to allow privacy, with the provision of laboratories or centers for computers and other necessary equipment.

Implementation priorities:

1- Activating the academic guidance and means of electronic communication between students and the academic advisor.

2-Selecting a program of additional appropriate lessons to help students defaulting.

3-Language training for students prior to acceptance into the program.

4- To provide suitable facilities for the study of individual privacy with a way that allows the provision of computer labs.

Subsection4.6the quality of teaching. (**)

Information should be provided for planning teaching strategies for the development of learning out comes desired in this program, and to assess the quality of teaching, and operations to prepare reports and study the curriculum and programs. Should this section

contain a table showing the percentage of teachers who are evaluating their teaching on a regular basis through a survey with students (or through other mechanisms).

The curriculum and Programs at Department of mathematics are reviewed as part of a regular cycle coordinated by the committee academic study plan and courses specialty committees which review and approve any modifications to existing or new courses; courses are examined in terms of their depth as well as the quality of the educational experience offered to students. All courses must be approved by the committee for courses and in order to ensure consistency, full-time faculty are supplied with the course descriptions and each member must provide a copy of the syllabus for each course to the head of the department.

Assessing the quality of teaching and pointing to the evidence on the quality of teaching, the report should include a summary of the strengths and areas requiring development, and implementation priorities. It should also include a summary of the survey data with the students for use in the overall evaluation of the program and courses, providing information on the sample size and response rate to these questionnaires. And also provides information from the questionnaires.

Data are collected to aid long-term planning and in evaluating the Programs which are then modified appropriately to meet the needs of students and the community, as well as to meet the requirements of Majmaah University.

Educational effectiveness and excellence in the Department is achieved due to a number of factors including the provision of high-quality Programs, the excellent faculty, and the strong support that is available for the educational courses and Programs.

All courses include assessment and testing to ensure that students meet the necessary standards to attain success on courses that are appropriate for them; the course catalogue and class schedules include clear descriptions of assessment processes.

In the Department of mathematics the content of the courses are specified. The academic instructor will be responsible for the delivery methods used; this person must also provide students with a syllabus at the beginning of the course. Moreover, NCAAA course

specification forms are completed by faculty members; these forms give in detail information such as, content and goals of the course, intended learning outcomes, resource materials that will be used, and the methods of assessment. At the end of the course, faculty must also complete a course report and should be submitted to the Program's coordinator. This report is used when reviewing the Program

Faculty in the Department of mathematics must evaluate their teaching and develop strategies to improve it; they are required to keep a portfolio of evidence containing course specifications and reports, the teaching philosophy of the faculty, a CV., students' course grades, examples of quizzes, samples of student achievement, and examination papers. The curriculum in the Department of mathematics has been designed to cultivate clear and efficient reasoning skills and has therefore designed a number of courses to promote students' ability to think for themselves, to teach them how to learn, how to communicate, and how to solve writing, reading or research problems. These include research project on which all students are required to register.

Teaching strategies that aim to improve students' thinking include cooperative learning and seminars; these use brainstorming which encourages students to express but also to question opinions, to consider critically unusual or contradictory opinions, and to develop their ability to solve problems creatively. Students are also given the opportunity to participate in contests and competitions. Other strategies like carrying out research and participating in Program instruction are included.

Strengths:

1-Matching teaching strategies with different types of learning outcomes which aims to develop the program.

2-Commitment by the faculty teaching and assessment strategies is contained in the descriptions of courses and program, with sufficient flexibility to meet the needs of different groups of students.

3-Students will be notified in advance and fully aware of the requirements of courses through the descriptions of courses, which include knowledge and skills targeted for growth, and requirements that should be performed, and assessments of students.

4-The vocabulary teaching is consistent with courses which are given to students and with descriptions of courses.

5 - Need to be the requirements of student attendance in courses clarified and are also monitoring strictly the commitment of the students.

6 - Based program management are supplied (head of the department or other officials) with reports on the teaching of each course, that includes these reports details on the contents of the course and any encountered difficulties when using teaching strategies planned.

Areas need to be developed

1 - Providing effective programs for creating and training new faculty and part-time workers.

2 – Textbooks and references are modern and include the latest developments in the field of study.

3 - Available textbooks and other requirements in sufficient quantities before the starting of the study.

4 - Use effective systems for evaluating courses and teaching.

5 - Regularly, reviewing the effectiveness of various teaching strategies used, and planned before the achievement of learning outcomes in different areas of learning, as appropriate modifications are made in the light of the available evidence.

6 - Appropriate modifications to the plans, teaching courses, if necessary, based on what reports show courses.

Implementation priorities:

1- Implementation of training sessions for new faculty.

2-Updat textbooks and references for students.

3– Using of effective systems for evaluating courses and teaching.

4- Developing appropriate mechanisms for reviewing the effectiveness of various teaching strategies used.

5- Flexibility in study plans to allow the development of appropriate adjustments6-Encouraging faculty members to develop appropriate strategies to improve their performance teaching.

Subsection 4.7 supports in order to improve the quality of teaching. (Total score 2 star)

Describe the strategies to improve the quality of teaching including a table showing the extent of participation of workers in training and /or other activities designed to develop teaching, and other related professional activities. The description should include the processes used to check and deal with cases in which the evidence suggests the existence of problems in the quality of teaching and the description includes arrangements to assess teaching performance excellence.

Faculty development activities are designed on the basis of the priorities of the University system, the Majmaah University Strategic Plan, and the specific needs of the faculty. The activities of the Faculty Development develop Plan in the areas of:

- 1) Personal, technical and professional skills of the faculty staff.
- 2) Academic teaching and research skills.
- 3) Leadership and administrative skills of all staff.
- 5) Critical and creative thinking skills.
- 6) Students' self-learning and on-going education skills.

In order to ensure the quality of learning and teaching all newly appointed faculty members involved in learning and teaching delivery should attend initial professional development

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programs, which ensure that they are appropriately prepared for their defined roles in learning and teaching and research degree supervision.

Another initiative in supporting quality of teaching at Majmaah University is the establishment of the Deanship of E-learning and Distance Education. Thus, it established the Deanship of E-learning and Distance Education which aims at:

1) Supporting the development of University courses in electronic form.

2) Providing faculty members with advice and technical support for the development of educational sites.

3) Providing an environment to stimulate electronic communication between faculty members and students.

4) Developing faculty member skills to enable them to convert their courses into e-courses.

5) Providing the appropriate environment and training to enable faculty members to carry out their tasks related to students' evaluation and monitoring and deal effectively with the Learning Management System at the University.

6) Creating incentives for faculty members who show excellence in e-learning application in the learning and teaching process.

7) Promoting the culture of e-learning at Majmaah university.

Evaluation operations efforts to support development in the quality of teaching

Pointing to the evidence on the effectiveness of the strategies used and presenting a report containing a summary of the strengths areas requiring development, and implementation priorities, evidence can include topics such as information about general trends in student assessments of the curriculum and the responses received in the questionnaires provided by participants in the program.

Strengths:

1-Foundation provides educational training programs in teaching skills and to all members of the faculty, whether new or on going from previous years, including those who are assigned the burdens, alibis, of teaching part-time.

2-Including training programs in the field of education for the effective use of new and evolving technology.

3-Availability of adequate opportunities for professional development and academic additional faculty, with special assistance for any of those who face difficulties.

4 - The post of faculty in professional development activities is monitored over to improve the quality of their teaching.

5 - Including strategies to improve the quality of education for improving the quality of educational support materials and teaching strategies contained.

Areas need to be developed

1-Encouraging faculty to develop appropriate strategies to improve the performance of teaching, and maintaining files on the documentary containing the evidence on the evaluation and optimization strategies that they make.

2-The official recognition and appreciation for outstanding performance in teaching, with the encouragement of creativity and innovation.

Implementation priorities:

Encouraging faculty members to develop appropriate strategies to improve their performance teaching.

Subsection4.8Qualified and Experience of Faculty Staff.(****)

Comment on the qualifications and experience of teachers relating to the requirements of the program. A table containing a list of 'class program and higher academic qualifications that they hold should be attached with reference to the part of names who teach courses within the field of higher education or not. Teaching staff should have qualifications and experience necessary for teaching the courses they teach, and keep up to date with academic and/or professional developments in their field.

Majmaah University is committed to hiring and keeping effective and qualified faculty. Qualifications for hiring faculty at different faculty ranks are explicitly stated in the Higher Education Manual.

It is worth mentioning that all the instructors in the Department are full time instructors and have a minimum of Ph.D. degree in mathematics from reputable Universities worldwide. Moreover, more than 90% of the teaching staff has more than 5 years of teaching experience and they are also involved in research activities.

Assessing the qualifications and experience of Faculty staff pointing to the evidence and submitted a report containing a summary of the strengths and areas requiring development and implementation priorities.

Department of mathematics rigorously follows Majmaah university guidelines and procedures to evaluate the performance of faculty and all personnels undergo regular evaluation using written criteria; this process is intended to encourage improvement and is seen by the Department as an important part of a faculty member's annual performance evaluation but also for the purpose of promotion and/or tenure which now places ever greater emphasis on teaching as a criterion for success. Thus, the Department has implemented a more rigorous teaching evaluation process; this includes reviews being carried out by students, peer observations and the chair of the Department.

Strengths:

1 - The faculty qualifications and experiences available are appropriate for the courses they teach.

1 - Composing of faculty from a balanced ratio of faculty who work full-time.

Areas need to be develop

The involvement of members of the academic staff in the scientific activities to be aware of the latest developments in the field of specialization so as they can engage students in learning includes those developments.

Implementation priorities: providing mechanisms for the participation of faculty members and students on an ongoing basis in scientific activities and various conferences.

Zulfi, Faculty of Sciences

Subsection4.9activities, field experience(training). (Total score does not apply)

Describing the procedures for the planning of the activities of field experience (training), and planning for development is deeply regarded.

Completing the verification process through the work of questionnaires on the level of faculty members is taken into consideration.

Evaluation of field experience submitted a report containing a summary of the strengths and areas requiring development, and implementation priorities.

Subsection4.10of joint operations with other educational institutions (if any). (Total score)

When there are partnerships with other institutions to assist in planning for and / or implementation of the program what you describe is through these partnerships and explains what has been done to evaluate the effectiveness of those activities.

Evaluation of joint operations (If any) pointing to the evidence and presenting a report which contains a summary of the strengths and areas requiring development and implementation priorities.

All faculty members in the Department of mathematics are evaluated on their previous year's performance. These criteria have recently been published on the website of the Deanship of Faculty and Staff Affairs. A standard form is used for performance evaluation; this is familiar to all staff and is usually completed annually by the department chair.

Course Evaluation Surveys developed by the Deanship of Quality are completed online by students at the end of each semester and before obtaining their courses grades. Once the evaluation timeframe comes to a close results can be accessed electronically so faculty are able to view feedback regarding their course in a timely manner this allows them to make modifications to their course before it begins again

Peer review is an entirely voluntary process for evaluating teaching at Department of mathematics. This process is to be revised in order to develop a more comprehensive system

in order to improve the validity and reliability of the evaluation to ensure consistency and flexibility to highlight strengths in teaching.

Evaluation of qualifications and experience of teaching staff

Strengths

- 1. Highly qualified trained faculty members.
- 2. Recent increase in faculty income.
- 3. Reasonable faculty services.





How satisfied are you with the level of education? To what extent University prepares its students comparing with that you received at the University of Majmaah?



Figure 20: Quality of education you received at Mathematics Program

How satisfied are you with the following elements at the University of






Figure 22Teaching style at Mathematics Program



Figure 23: Curriculum at Mathematics Program



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Figure 25: MU helped me to enter the labor



Figure 26: Possessing of the technical skills

Mathematics Department





Figure 27: Graduates are characterized by the enjoyment of high work ethics

Standard 5: (student activities)

(Overall Rating: * * *)

The registration and admission should be reliable and fast responding. The standard records must be secretly reserved. The students' rights and responsibilities should be clear and identified. There should be some rules for punishments, which must be clear and transpires. There should be some academic tools for supporting the students. Not only the academic perspectives, but also the extra curriculum activities and anything else the students may need and it can be achieved through those standers.

The college of Science deems the administration and support services for students to be of major importance.

The administration and support services for students are supervised and managed by the Vice Rector of Education and Academic Affairs. Two supportive Deanships are responsible for developing, monitoring, implementing, and following up on the required responsibilities and services. These two deanships are: the Deanship of Admissions & Registration, and the Deanship of Student Affairs.

The Deanship of Admissions and Registration is responsible for students' admissions, which are handled through the electronic Edu-gate and e-register systems. The Deanship of Student Affairs is responsible for all student activities and services, such as academic and social counseling, health services, housing, sports, cultural activities, training, transportation, student rights, and all other services.

The Deanships assign these responsibilities to the colleges through the Vice Dean for Academic Affairs. The responsibilities and regulations at these Deanships are written and approved by various authorities, including the Council of Higher Education and the University Council. Some of these services and regulations are approved internally by the Rector, Vice Rector, or the related Dean.

Key performance indicators

1- Ratio of students to administrative staff.

2- The average rating by students on response to the statement "Course registration is organized and easy".

2- The average rating by students on response to the statement "Students supporting services are adequate" in the graduate evaluation survey.

In addition, structured interviews were conducted with the heads of both the Student Affairs Deanship and the Deanship of Admissions and Registration at the University, which added value to the analytical process. At the College level, multiple meetings were conducted with the Vice dean for academic affairs and the chairmen of academic guidance committees. Furthermore, one member of the accreditation committee is also a member of the academic guidance committees.

There is evidence about the performance of Student Affairs department of through surfing the student's opinions about the level of these services.

(5-1) Accepting Students

Operations of Accepting students must be effective; users can rely on them and easy to use for students. The admission process provides students with access to the University but also ensures that all learners are given every opportunity to succeed in their studies, enabling them to attain their personal objectives. Entrance requirements are determined at three levels: the University, the College and the Department. All admission information and policies are described clearly and accurately on these websites and in the Department's Student Catalogues and Handbooks The following information is available on the websites mentioned above: admission requirements; requirements and responsibilities for enrolled students; degree, certificate, graduation and transfer requirements; suspension, probation, dismissal and re-admission policies; and policies regarding the collection and retention of student academic records and data.

This standard is measuring the achievement of the following:

(5-1-1) Admission and registration Operations is easy to use to students and not time consuming i.e. are simple and efficient.



Figure 29: Admission and registration Operations is easy in use on students



(5-1-2)AdmissionRequirements is a regular and fair.

Figure 30: Admission Requirements is a regular and fair.

(5-1-3)Information of skills needs study through education about or learning email as before Registration.

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Figure 31: Information of need skills for study through education

(5-1-4) The Department of mathematics offers Mentors for students who are familiar with the details of the requirements for courses to help students before the start of registration.



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(5-1-5)Mathematics Department determines Rules of acceptance supported by the hour's previous studies.



Figure 33: Mathematics Department determines Rules of acceptance

supported

(5-1-6) University Administration classifying the students by the courses taken concerning hourly calculated before the start of the study.



(5-1-7) All Information about the Foundation is available for all to see



Figure 35: Availability of the Foundation Information



(5-1-8) Institution provides a comprehensive record to provide new students.

students.

(5-2) Students Records:

Students Records are kept in private place, with the importance of actions programmed to automatic transmission of statistics data where the education institute needs to performance requirements for external reports and to prepare reports about the students.

The Department of Mathematics maintains complete and accurate records of all students enrolled from the time of registration to withdrawal or graduation.

These records form a part of the well-organized system of student accounting, which is accessible and reflects the current status of all students. Such records conform to Majmaah university rule and regulation for privacy.

Department of Mathematics' student academic records are comprehensive, accurate and secure. While such records at Majmaah University are maintained in a central secure location and protected behind firewalls, records are backed up daily and stored securely off site. The confidentiality of the information of each student must be of priority.

This standard is measuring the achievement of the following:

(5-2-1) The University provides effective Protection of students records with the need to keep the Central files which contain the accepted students records and their performance -On over the years- in safe place.

The university keeps backup records in another place, would prefer to be in a separate place, outside the institution.



Figure 37: Effective Protection of students' records provided by MU

(5-2-2) The University determines the official and policies instructions of students' records which need to keep and gets rid of other records.



Figure 38: The official and policies instructions of student's records, determined by MU

(5-2-3) The university has the clear rules to control the confidential information and sets the process of access to the individual records.



Figure 39: The University is totally authorized to control the confidential information

(5-2-4) The University achieved officially from fulfilling the student's requirements for graduation





(5-3) Management For students

University place Rules and regulations have been made to ensure the existence of procedures for the Management and for students.

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The Department treats all complaints seriously and responds quickly and fairly to students' complaints and is committed to treating all students in an unbiased and respectful manner. In this regard, the College of Science implemented the Student Rights Protection Unit to implement fair and consistent processes for student management and to ensure that no punitive actions or discrimination is committed. It also advises students in the event of complaints and explains how the policy works. Disciplinary and appeals processes are consistent with the mission and values, both of which promote high-quality education, of the Department and the College.

Effective mechanisms to look into disputes grievances and appeals through independent within the enterprise must be existed by MU.

This standard is measuring the achievement of the following:

(5-3-1) Council Management wrote the adoption of the "conduct rules" which determines the rights of students and their responsibilities and be saved in the available manual within the Enterprise on a wide.



Figure 41: The rights of students and their responsibilities were cleared for them

(5-3-2) University Defined regulations and actions that must be taken; this includes the responsibilities and the penalties which may be imposed.

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Figure 42: University Defined regulations and actions

(5-3-3) The University shall take Procedures disciplinary without delay.

University documents all subjects and including the details of the evidence in the records of the official retains undertaken in a confidential place.



Figure 43: The University shall take Procedures disciplinary without delay

(5-3-4) The University describes the procedures appeals and grievances that students go through the systems and rules published and known in the educational institute. These

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Regulations clarify the rules and bases that can be performed by the appeal and grievance procedure for academic to take decisions and reach the possible solutions.



Figure 44: The University describes the procedures appeals and grievances

(5-3-5) Procedures of appeals and grievances included do not waste time on issues of nontask but give way to fairness for topics of interest to students and support providing Services.







Figure 46: University Defined regulations and actions



University keeps all subjects, including the details of the evidence, in official records, and the records place should be safe.



Figure 47: The University shall take Procedures disciplinary without delay

(5-3-4) The University describes the procedures that student take through systems and rules published and known in education institute. These Regulations clarify the rules and bases that can be performed by the academic institution. These regulations helps to find possible solutions to any problem that students face..



Figure 48: The University describes the procedures appeals and grievances

(5-3-5) Procedures of Appeals and grievances is not intended to waste the time in but rather it is a way to the students' needs. Also, it provides service and support to the students' interest.



Figure 49: Procedures of Appeals and grievances intended not to waste time

(5-3-6) Procedures of Appeals and grievance includes addressing issues of impartially people, or committees that do not have parties or even resolution. And to those who expected punishment.



(5-3-7) The University established Procedures that include protecting students from being subject to punishment, injustice or discrimination against them.



Figure 51: The University established Procedures

(5-4) students Planning Services and evaluation:

A procedure has been found for effective planning of activities and student's services, and it is supervised and evaluated by administration.

Each student at the Department of Mathematics is assigned a faculty advisor at the time of his initial enrollment. The faculty advisor is available to solve any problem that might arise during the student program. The University considers student advising by faculty as an important teaching-related activity.

The faculty advisor is expected to advise students in planning their academic programs during early registration, and throughout their academic year. The faculty advisor has the following main roles:

1- Advice and help students in their registration.

2. Provide students with clear guidance in dropping and adding courses, and in improving their academic performance.

3. Ensure that the students understand the academic regulations and follow their academic programs in a sequential order.

4. Follow-up students' academic progress, especially those with unsatisfactory performance.

This standard is measuring the achievement of the following:

(5-4-1) Services and resources assigned to illustrate an educational requirements for students.



Figure 52: Services and resources allocated for students.

(5-4-2) The University monitors the effectiveness of Services available for students through surveys to see the benefit of these Services and their satisfaction with it.

The University is revising Student services through the results of the evaluation, and feedback.





(5-4-3) University Provides appropriate places and financially support adequate student Services.



Figure 54: University Provides appropriate places and financially support adequate student Services.

(5-5) Guidance and Medical Services:

Educational institution is offering medical Services and appropriate counseling through qualified persons. It also maintains the privacy of students and follow-up the students need to these services.

This standard is measuring the achievement of the following:

(5-5-1)MU is choosing specialists, who have Professional qualifications to work in students Services Guide and medical service.



Figure 55: MU is choosing specialists, to work in students Services Guide and medical service.

(5-5-2) Medical Services and counseling are accessible easily, andthey are available when needed. Medical services provided in the cases of emergency.





(5-5-3) Academic Guidance, vocational and career guidance in faculties or departments are situated in the appropriate location in the university.



Figure 57: Academic, career guidance, and vocational are rooming in the appropriate location

(5-5)Non- classroom activities for Students:

Education institutes should take necessary steps for the non-classroom activities that are appropriate for students.

This standard measures the achievement of the following:

(5-5-1) the university creates opportunities to do the religious duties according to the regulations.



Figure 58: MU creates opportunities to do the religious duties according to the regulations.

(6-5-2)The educational institutes should take necessary actions to organize and encourage the participation of the students in cultural activities, such as participation in clubs, participation in associations, participate in arts events.





(6-5-3)The educational institution encourages students who are skilled in sports to participate in the activities. The institution shall organize competitive and non-competitive activities.



Figure 60: Encourages students who are skilled in sports to participate in activities.

Evaluation of student administration arrangements and supports ervices for students in the program

Department of Mathematics uses the University's admission system in the form of Edu-gate and e-Register. This ensures adherence to standard operating procedures. These procedures are clearly documented and applicable to all students so that the same information, admission and acceptance criteria, withdrawal policies, student records' management, and grievance/appeal systems are applicable and therefore fair to all. Student records are secure, and there are clear rules regarding the privacy of information; these rules ensure that access to student records is strictly controlled. Wide and varied opportunities are available for students to participate in religious, cultural, sporting and physical activities.

Strength

1- Students at Department of Mathematics are provided with adequate student's support services

2- The Department of Mathematics has well-established policies and procedures for students' admission, registration, withdraw, transfer, protecting privacy of information, controlling access to student records, and eligibility for graduation. Students right at Department of Mathematics are protected by rules and regulations.

3- Students at Department of Mathematics are provided with adequate extra curricula activities.

Areasforimprovement

1- The Department of Mathematics should periodically examine and adjust its admissions policy for continuous improvement.

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2- The Department of Mathematics should regularly monitor effectiveness and relevance of services through surveys of student usage and satisfaction; and services should be modified in response to evaluation and feedback.

Priorities for action

1- Examine and adjust Department of Mathematics admissions policy for continuous improvement.

2- Monitor effectiveness and relevance of services through surveys of student usage and satisfaction; and modified service in response to evaluation and feedback.

3- The Department of Mathematics should establish policies and procedures regarding the review of student academic performance.

4- A mechanism must be identified and implemented to review and assess the outcomes, in terms of students' attainments and achievements, of the counseling processes. This will ensure that the beliefs and practices of these processes are actually effective.

Standard 6: Learning Resources

(Overall Rating: * ***)

The Learning Resources are backbone of the educational process. As it includes libraries and provisions, and it provides access to electronic and other reference material. Learning resources must be planned to meet the particular requirements of the institution's programs. It is also provided at an adequate level. Library and associated IT facilities must be accessible at times to support independent learning, with assistance provided in finding material required. Facilities must be provided for individual and group study in an environment conducive to effective investigations and research. The services must be evaluated and should be improved in response to systematic feedback from teaching staff and students.

This report seeks to assess the learning resources and the quality of programs available for faculty and students of the Faculty of Science in Zulfi. It will also develop a plan to improve the place, and address the weaknesses and identify improvement priorities. In addition, it will identify strengths to keep them and determining the scale of operational as well as procedures to improve and to define activities. The report focuses on the available library, e-learning services, the electronic gate, and Internet service. Adequate resources must be provided for the development and the upgrading of equipment, collections and cooperative agreements with other agencies.

Main Components of Learning Resources:

- 6.1 Planning and Evaluation
- 6.2 Organization
- 6.3 Users Supports
- 6.4 Resources and Facilities

Evidence and Performance Indicators:

We can derived from surveys and evidence about the quality of learning resource provision and performance indicators, user satisfaction, success rates for students in accessing course reference material, documents describing processes for identifying and responding to course requirements. The opening time of facilities should be available for students and teaching staff. Information and orientations should be available for new students when needed. The

institution should be able to provide information about level of provision through books, periodicals and web-based resources in comparison with institutions offering similar programs.

Key Performance Indicators:

Data has been getting through: the review of documents, interviews with students and faculty, student outcomes, review sites Library Prince Salman, Faculty of Science, Zulfi, a digital library, electronic questionnaires and the Edugate of the university.

- Average rating by students in the questionnaires
- Learning resources available for training.
- The average assessment of the graduates.

6.1 Planning and Evaluation (****)

Policies and procedures must be available to ensure that resource materials and services needed to support student learning are adequate and appropriate for the programs offered at the institution. It should be regularly evaluated, and updated as required.

A) The Strengths

- 1- The library has many copies of up-to-date editions of the important references and periodic needed by all the departments. Moreover, a powerful computer network is available.
- 2- Up-to-date international text books are devoted for program courses. Also, recommended books must be available for each course. This is achieved each academic year.
- 3- There is special committee concerned with these requirements. This is a major task of the committee of Education and Learning Resources.

The Department of e-learning has learning resources on the site of the university, and it gives special attention to the specific requirements of the academic departments and research units. Depending on improvement plan, home page on the college website provides advice on the materials required to support education and learning.

6.1.1 Part of the questionnaire describes the means of communication (phone and e-mail queries and the University Center)

It shows the achievements of the faculty members who are in charge about the program and its courses, and it gives advice on a regular basis for the required materials to support teaching and learning



Figure 61: Describes the means of communication forCenter



Figure 62: Identification of the achievements of faculty members

It Identifies the achievements of faculty members who are responsible for the program and its courses, and it provide advice on a regular basis for the required materials to support teaching

and learning (n=45)

Result of the satisfaction rate with the adequacy of office support and digital information sources to meet the needs of the work which has been done to clarify the resolution of this rate



Figure 63: Describing the identification of the adequacy of office support and resources Describing the identification of the adequacy of office support and resources to meet the needs of the digital information (n=51)

- 1- Questionnaire shows that 77% of students participating in the questionnaire were satisfied with the service. They also confirmed that the educational resources available in the University of Majmaah Library are necessary for their studies.
- 2- It also shows evaluation the participation of faculty members and students in determining the adequacy of learning resources and services. And if the extent of using it consistent with the requirements of teaching and learning. The faculty members were asked to identify the resources needed for education and research provided by the deanship of scientific research .These resources are submitted to the Library Affairs Deanship. In addition, the university sells books with lower costs and the department determines the annually required number of books and copies for students. The library situated on the first floor, and it provides easier access to read and to access the required books. It Determines the recommended books for them, and recognizing the fact that students need to extend the hours of reading and researching.

The library opening hours must be extended. It currently opens from 8:00 to 5:00 from Sunday to Thursday. It provides collections and materials on a regular basis. Digital library project was introduced to the students and that would provide access to books and manuscripts. The library will also give guidelines about the borrowing of materials as well as fines of delay



Figure 64: Describes the identification of easy access to faculty members and officials









A) Priorities for Improvement

There must be evaluation processes, and it should include gathering information about library and other learning resources that are used. Also, the analysis of the data about teaching and learning requirements must be introduced for different programs in the institution

6.2. Organization (***)

The library or resource center must be managed efficiently to provide required services in a secure environment conducive to effective study.

Realizing the fact that students need extended hours for reading and research, the college library have extended its daily opening periods which is currently from 8:00 am to 2:00 pm daily from Sunday to Thursday.

Library collections and materials are bought on a regular basis based on submitted requests from various academic departments which take into account the teaching and learning needs. These materials are catalogued and referenced in international basis consistent with the coding systems. A separate college digital library project is being finalized. It will provide access to books and manuscripts. All books are magnetized and bar-coded to ensure secure systems for borrowing.

A) The advantages

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- 1- There are clear guidelines governing the borrowing of materials, as well as, the imposition of fines for late returns. The maximum number of books a faculty member can borrow at a time is 30, whereas a student can borrow 20 books.
- 2- Several copies of books are available to ensure at least one copy is always on-hand for visitors, and materials in great demand are not borrowed out for long periods of time.
- 3- The College library has clearly displayed its codes of conduct for the users, and students are satisfied with the facilities given to them.
- 4- On the other hand, newly integrated automated library software has been introduced for on campus and off campus searches (Unicorn), and access are available 24/7 to students and faculty, providing up-to-the-minute access to University activities and course material (Annex G6.6.2.2 Annual report of libraries Deanship).

Realizing the fact that students need extended hours for reading and research, the college library have extended its daily opening periods which is currently from 8:00 am to 12:00 pm daily from Saturday to Wednesday. On Friday, it opens from 2 pm to 12 pm (Annex G6.6. 2.1 Annual report of libraries Deanship).

1-Library collections and materials are bought on a regular basis based on submitted requests from various academic departments which take into account the teaching and learning needs. These materials are catalogued and referenced in international basis consistent with the coding systems. A separate college digital library project is being finalized. It will provide access to books and manuscripts.

2-There are clear guidelines governing the borrowing of materials, as well as, the imposition of fines for late returns. The maximum number of books a faculty member can borrow at a time is 30, whereas a student can borrow 20 books. All books are magnetized and bar-coded to ensure secure systems for borrowing.

Several copies of books to ensure at least one copy is always on-hand for visitors, and materials in great demand are not borrowed out for long periods of time. The College library has clearly displayed its codes of conduct for the users. And students are satisfied at the facilities given to them.

On the other hand, newly integrated automated library software has been introduced for on campus and off campus searches (Unicorn), and access has been provided to services are

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available 24/7 to students and faculty, providing up-to-the-minute access to University activities and course material.

Illustrations of the following questionnaire (4) identifying and (6)





3-The use of the data on learning sources will be evaluated teaching and learning. The program aims to eliminate library users' illiteracy and teach them how to take advantage of a wide range of different learning resources available. The approach is being implemented for users of the library in the program curriculum reform



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The figure describes the identification of the availability of brochures and documents relating to the service and ease of understand (n = 46)

Questionnaire shows that 96 percent of students participating in the questionnaire were satisfied with the service. They also confirmed that the educational resources available in the University of Majmaah Library are necessary for their studies.

4- It evaluates the extent of giving the organizers of the program, administrators of the program or the representatives of the program the opportunity to contribute in the evaluation of pre-planning to provide provision resources and services, in addition to their participation in the survey about the program.

University libraries have their library databases, and it has 3,600 titles published in both books and magazines to assist researchers in the selection of appropriate books and periodicals. The link of the digital library enables users to download the full text of the magazines and newspapers published by the University.



Figure 69: Extent of giving the program organizers management

Questionnaire illustrates the extent of giving the organizers of the program, administrators of the program or the representatives of the program the opportunity to contribute in the evaluation of pre-planning to provide provision resources and services, in addition to their participation in the survey about the program.

5- The faculty must provide advice on a regular basis, about reference materials (sources), which must be booked in the library (in sections of books and references reserved) to ensure users' access to the necessary resources, and to respond appropriately to the advice offered by the faculty.



Figure 70: The faculty providing advice on a regular basis

Questionnaire shows that the faculty provides advice on a regular basis, about reference materials (sources), which must be booked in the library (in sections of books and references reserved) to ensure necessary users' access to the resources, and to respond appropriately to the advice offered by the faculty (n = 47)

Questionnaire shows that 70% of the students participating are satisfied with advice giving by faculty on a regular basis, about reference materials (sources), which must be booked in the library (in sections of books and references reserved) to ensure users' access to resources necessary, and to respond appropriately to the advice offered by the faculty.

B) Weakness

The library currently opens from 8:00 am to 2:00 pm from Sunday to Thursday.

C) Priorities for improvement

- 1- Agreements of cooperation must be established with other libraries and resource centers for interlibrary borrowing and sharing of resources and services.
- 2- The library should increase their daily work from 08:00am to 08:00 pm.

6.3 Supports for Users (**)

Adequate support must be provided to assist students and teaching staff to make effective use of library services and resources.

The new Information Literacy Program aims to instruct library users on how to make use of the wide range of different learning resources available. The library orientation is being implemented in the reformed program curriculum and each student is required to participate and learn about learning resources including the library.

Qualified librarian is available to help users and answer their questions. Furthermore, electronic system is being developed to assist users to search and find library collections.

There is a department for reference services. This department introduces services to the users, such as direct and indirect reference services and guidance through phone, e-mail and fax. It facilitates the use of the library through the guidance to the appropriate paper references and the way of how to use it. It also helps users to identify reference materials through research in automated system. Furthermore, it held training courses for new students on how to use the library and the automated system in the library.

The program aims to eradicate illiteracy and provide new information to the library users and how to take advantage of a wide range of learning resources available from different sources and different learning. Library orientation is being implemented in the reform program. The registration helps users and responds to inquiries, mail order. There is also a corner to help users to search and to customize collections of book.

The library offers programs to create guidelines and training for students, and to prepare new users for the use of library facilities and services. The registration helps users to respond to inquiries and mail order. There is also a corner to help users to search and to customize collections of book.

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6-3-1 the library offers programs to create guidelines and training for students, and to prepare new users for the use of library facilities and services. The registration helps users to respond to inquiries and mail order. There is also a corner to help users to search and to customize collections of book.



Figure 71: The provision of library programs to create guidelines and training

Questionnaire describes programs to create guidelines and training for students, and to

prepare new users for the use of library facilities and services. (n=45)

6-3-2 Questionnaire shows that 88% of students are satisfied with the participants in the questionnaire to provide guidelines and training for students, and to prepare new users for the use of library facilities and services.



Figure 72: Assistance library users to search and access to the information

Describes the identification of assistance to library users to search and access to the information they want and ways to use this information (n=48)

Questionnaire shows that 70% of students are satisfied with the participants in the questionnaire to provide assistance to library users search and access to the information they want and ways to use this information

6-3-3 Available library, "service providing references" which answer any questions in-depth by qualified librarians.

Management of reference services in this library provides services to beneficiaries, such as direct and indirect reference services and guidance through phone fax e-mail. Facilitate the use of the library through routing to the appropriate paper references and the way of how to use it. It also helps users to determine the reference materials through research in the automated system and training courses held for new students on how to use the library and the automated system in the library



Figure 73: Available library "service providing references"

The figure describes the identification of available library "service providing references" through which questions can be answered in-depth by qualified librarians.(n=48)

Questionnaire shows that 45% of students are satisfied with the participants in the questionnaire which is available on the library "service providing references" through which questions can be answered in-depth by qualified librarians

6.3.4 There are electronic systems and / or automatic, with the potential of research, to assist in access to sources of information within the institution, or other group .

On the first floor of the Central Library of Prince Salman, there is an automated system. It has been equipped with new PC system. It was created to facilitate the search process in an automated library system and directing users to the best way to use this automated system



Figure 74: Electronic systems and / or automatic, with the potential of research

Questionnaire shows that there are electronic systems and / or automatic, with the potential of research, to assist in access to sources of information within the institution, or other groups. (n=48)

Questionnaire shows that 80% of students are satisfied with the participants in the questionnaire which is available on the library "service found electronic systems and / or automatic, with the potential of research, to assist in access to sources of information within the educational institution or other groups.

6-3-5 Faculty must inform students in the program on the new developments in the library, such as reference materials, training programs, any changes in library services or opening hours Portal of the University Library collected on the website of the University has detailed information about the Deanship of Faculty Affairs in general. It also provides information about other libraries in the University. On the site, there are a large number of links interested. These links are the link to the digital library and link the database on the Internet.

Figure 75: Informing faculty and students in the program on the new developments in the library

Questionnaire shows that faculty should inform and students about the new developments in the program in the library, such as reference materials, training programs, any changes in library services or opening hours (n=48)

Questionnaire shows that 85% of students are satisfied with the participation of faculty and students in the questionnaire about the new developments in the library, such as the reference materials, training programs, and any changes in library services or working hours.

A) The Strengths

- 1- Well trained Liberians are available.
- 2- A powerful computer network is available.
- 3- All the departments are informed.
- 4-

B) Weakness

- 1- Only one Training Program was provided.
- 2- Little number of qualified librarians.
- 3- The number of trained Liberians is not enough.

C) Priorities for improvement

Printed or electronic guides must be provided to help users finding materials for popular subject area.

6.4. Resources and Facilities (**)

Appropriate sources and reference material must be available for the program.

Also, facilities and equipment should be available, and library resources should be suitable to the needs of the program. A sufficient number of books, journals and other reference materials is available, including electronic sources, to meet the needs of the program Modern computer technologies are available and sufficient to meet the needs of the program in supporting the process of electronic access to sources and reference, materials, available books, journals, and other reference materials in both Arabic and English, as required by the program and related research.

A) The Strengths

- Needed budget is consistently made for ownership, cataloguing, equipment, and for services and system development.
- 2- The availability of online access and borrowing facilities are used to reduce commitment of providing physical resources on site
- 3- Up to date computer equipment and software are available to support electronic access to resources and reference material.

B) Weakness

- photocopying facilities supported by efficient payment mechanisms are not available for users (students)
- 2- Appropriate facilities are not provided for laptop and personal computers.

C) Priorities for improvement

- 1-Sufficient facilities should be provided for both individual and small group study and research.
- 2-The resources (facilities and materials) are evaluated with similar good institutions, to see if it is suitable for institution and the programs being offered.

Standard 7: Facilities and Equipment

(Overall Rating :***)

Facilities and equipment must be available for teaching and learning in the mathematics department. The use of facilities and equipment should be checked, Then, An assessment should be made on regular basis through Consultations with faculty, staff and students.

The responsible member about this standard will be faculty not program administrators. However, regardless of who is responsible about facilities and equipment, their availability can have a significant effect on the quality of a program. In this section, comment should be made on issues that have impact on the quality of the program. These issues would include, for example, classroom availability, equipment maintenance, and technical support for IT equipment to meet program needs.

Facilities at the College of Science, including Department of Mathematics, include sufficient space and advanced technology which allow faculty to deliver effective and efficient learning. Also it allows high quality Research-centered teaching through a variety of instructional methods and approaches in a helpful learning environment. As a result, good use of these facilities and equipment enable students to take responsibility for their own learning.

The use of these facilities and equipment are assessed regularly in terms of their suitability for all members, i.e. students, faculty and staff.

Majmaah University has attempted to introduce policies, so that the planning and maintenance of all its colleges' facilities and equipment are efficient and useful. Thus, clearly organized processes are available for the possession of facilities, includes tendering processes, procedures for procurement, and invoicing systems to document and track procurement. There is also a documented system in the University for the maintenance andrepair of facilities, as well as a well-defined system for planning and budgeting. It also involves certain academic and administrative units in Majmaah University. In addition, there are six workshops about the maintenance and repair of facilities including research

equipment's.

<u>Facilities at mathematics department</u> include sufficient space and advanced technology which allow faculty to deliver effective and efficient learning. Also it allows high quality Researchcentered teaching through a variety of instructional methods and approaches in a helpful learning environment. As a result, good use of these facilities and equipment enable students to take responsibility for their own learning. The use of these facilities and equipment are assessed regularly in terms of their suitability for all stakeholders, i.e. students, faculty members.

The basic components of this standard are:

- Public policy and planning
- Quality of facilities and equipment
- Management and administration of the facilities and devices
- Information Technology

Comments and a general description of good practice

All those involved in the educational institution, Students and faculty members, must be provided consistently with healthy, safe, and attractive environment. It also must conform to the terms of the normal planning and construction, and the requirements of the high quality teaching and learning.

Educational institution must relyon the use of the facilities, and there are procedures to ensure that utilities can be used for other purposes. A necessary arrangement should be made to protect valuable equipment especially to the one that can easily be damaged.

In programs that require laboratories or technical equipment like computing facilities. There must be effective regular maintenance. There must be a technical support which should be available with the possibility of immediate response in case of equipment damaged.

The classroom should be equipped with al lits needs of all media, so that will help to provide effective learning with appropriate technical support.

Performance indicators can be obtained to provide evidence of the quality of the facilities, equipment, and software. Documentation of the planning process surveys can express students' satisfaction. The availability of equipment compared with other educational institutions offering similar programs, direct observations should be taken into account.

Regular assessment and schedule maintenance should be provided about the quality of the facilities and infrastructure. There should be rules and regulations for the use of equipment and facilities. Moreover, Performance indicators about damaged devices should be available in comparison with other similar institutions.

Report on subsections of the standard:

Policy and Planning

Representatives must participate in the program for the improvement of facilities and equipment, and to ensure the development of the program. In addition, we should check the provision of facilities and equipment to balance between the needs of the program and policies of the educational institution, in order to ensure compatibility of systems and resources available

Planning for the provision of facilities including purchase, maintenance and replacement, is accomplished through consulting faculty members and the head of the Department. Then, recommendations on these facilities are forwarded to the college administration; the Dean and the vice Deans, through the Head of the Department. The available facilities are adequate for the Program purposes.

Optimization

The university provides our department a number of laptops. Each faculty member in our department has a laptop computer; in addition, it provides a number of desktop computers to ensure work continuity, so they can avoid some of the faults.

The mathematics department council had been consulted the faculty members in the purchase of books approved the teaching program, and then a groupof all books are submitted to the Dean of the College to be provided, taking into account that all the books from the beginning of 2010.

The department makes copies of the records of facilities maintenance for faculty members to avoid faults, and for the continuity of the quality of teaching.

Committee's recommendation

Consulting should be with made with faculty members about the equipment before buying them. Also, an arrangement sand timetable process should be made for procurement processes, and it should be clear to the members of the faculty.

Laptops are replaced every 5 years to cope with modern software specification and difficulties as it is required by department of Mathematics.

The college provides a sufficient number of important equipment to ensure learning quality, example of this: photocopiers, scanners, printer and colorful printers.

Quality of and convenience of Facilities

Facilities and equipment must have a high degree of quality, with the use of effective strategies to assess the needs of the program for quality and related services. The entrances of the College buildings are reconstructed to meet the needs of persons with physical disabilities or other special needs. The overall evaluation of the final year students Shows to the quality and adequacy of the classrooms facilities.

Optimization

The Security and Safety unit Committee in the mathematics department has done a full inventory of the contents of the department for the equipment and facilities that belong to faculty members, students and workers in the new building. We moved to the new building in the beginning of the academic year 1432 - 1433 H. We also construct illustrative maps for faculty offices, classrooms, the public library and the mosque to facilitate access to them.

Computer lab was established for the students in the mathematics program. It aims to prepare place for students to receive for private counseling from the faculty.

Committee's recommendation

Feedback must continue to assess the quality of facilities. And there should be specific strategies to deal with the opinions and respond to them.

The department continued the procedures to improve facilities for students, staff and faculty members with physical disabilities.

The following table shows some of the main learning facilities in the Department of mathematics:

Class rooms	Computer lab	Video conference room
*7	1	1

*7 of them are equipped with smart boards.

Besides that, each faculty member has a special office equipped with a PC with required software.

The following Figure shows the overall evaluation of the faculty member to the quality of the classrooms facilities at mathematics department in Majmaah University.

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Figure 77: The classrooms and laboratories were ready for faculty members.

The Questionnaire shows faculty's assessment about the College Readinessfor the first semester of the academic year - 1432/1433H. And itassured that the classrooms and laboratories they use were ready for faculty members.

Safety requirements

- 1- The Safety and Security unit in the University provides security and safety system to secure the facilities; Cameras are available in the facilities for 24 hours.
- 2- Fire evacuation policy and fire drills are practiced in all places.
- 3- First aid is available in all faculties.

Mathematics Department

4- The College has emergency plans, safety signs, emergency exit signs and laboratory safety manuals.

Management and Administration

Management must have facilities, equipment and support services to ensure effective use of the facilities available.

All equipment's in the Department as well as those with the faculty members are recorded in lists in the main store in the university.

The maintenance of this equipment's is available in the University as well as the workshop in the College. Equipment which is out of service can be replaced according to the University regulations.

Security systems are available to protect privacy of personal and institutional information against electronic threats. Moreover, the equipment is monitored electronically as well as through the security men who are available 24 hours on all exit gates in the buildings of the College.

Cleaning services for the infrastructure in the Department are available and effective.

Optimization

The college staff completes lists of equipment needed for cleaning, and to get rid of trash and garbage effectively.

The department committee plans a scheduled Procedure for facilities uses in some other departments. So the department serves most of the scientific departments in the university.

Committee's recommendation

There should be specific and accurate procedures to assess the equipment on a regular basis with the provision of the actual maintenance and the possibility of replacing in the case of strong damaged.

The main equipment needed for the research purposes for faculty members in the Department of mathematics are PC computers, which are available for all faculty members in their offices, and uploaded with required software and connected to internet spots.

Moreover, these requirements are available in the computer labs in the Department.

Information Technology

Computers, software and related support services are available and suitable for the program, and they area managed to ensure effective and safe optimal use.

IT department was an area of improvement in the past, so it is one of the priorities in the strategic plan. Accordingly, significant improvements have been made.

Were successfully implemented the following:

1) Installed the latest hardware

2) Network infrastructure

3) Internet bandwidth expanded and services upgraded

4) Upgraded to smart classrooms in the University.

Each faculty member is provided with a laptop computer and a college wide wireless internet service. Technical Support is provided when needed. Security systems are in place to protect privacy of personal and institutional information and to protect externally introduced viruses.

Optimization

College provides all faculty members with laptopswith special softwarefor the smart boards.

There is a computer lab for each department, so all students of the program have access to the Internet.

The college provides internet access to faculty members.

The Mathematics Department organizes some technical workshops among faculty members about how to use some of the sites to improve e-learning.

Committee's recommendation

Opportunities for faculty must be available to give their views regarding the plans for the purchase, maintenance and replacement of equipment and software in the college.

Evaluation of facilities and equipment for the program

- 1- Computer labs are equipped with computers and software.
- 2- Classrooms equipped with both blackboards and smart boards.
- 3- Existence of Video conference rooms.
- 4. Existence of information security systems against electronic threats.

Standard 8: Financial Planning and Management

(Overall Rating: **)

Financial resources must be sufficient for the effective delivery of the program. Program requirements must be made early, so that it can be e considered in institutional budgeting. Budgetary processes should allow for long term planning, for at least three years period. Sufficient flexibility must be effective to deal with an unexpected event. However, there should be personal liability and reporting according to rules and regulations.

Most of the responsibility foractivities this standard related to college administration rather than program administration. However regardless of who is responsible, the quality of resources, financial planning and management can affect the quality of the program.

The funding for the College of Science is fully supported and provided by the University according to the rules and regulation of the Ministry of Finance. Majmaah University employs recognized governmental and financial accounting policies and procedures to ensure that its financial and accounting processes are properly controlled.

Main components of this standard as applied to educational programs are the following:

8.1 Financial Planning and Budgeting:

Sufficient financial resources must be available to support the effective delivery of the program. This means both maintenance and continuity of activities. And we should keep financial support for new initiatives to develop the program and to improve its quality. Funds are not unlimited, and resources must be effectively managed to avoid waste and to control allocations. And allocations should be ranked from low priority to high priority if possible to seek alternative supplementary funding opportunities.

The budget of the university allocated by the government is the largest. However, the University has also attempted to seek out other sources of funding to supportlong- term

financial plans as mentioned in its new Strategic Plan. As a result, the university is working to develop strategies to diversify its sources in order to reduce its dependence on the government as a single source of funding.

The University will not own money in order to meet unforeseen costs that can impose certain constraints. Furthermore, funds allocated for a particular purpose must be used for that purpose only. And the University's accountants must clarify this. All university expenses must meet the regulation of the finance ministry.

It will be achieved through:

1- Proposals for new programs, major program changes, and other activities with financial implications, equipment or facilities are accompanied by business plans. It includes independently verified cost estimates and cost impacts on other services and activities.

2- If new projects or activities are financially supported from existing funding. The strategy cost is made clear and intermediate. Costs and benefits are assessed on both long and short term.

3- The financial resources is available for the program and sufficient for good quality program provision, and it is compared with the costs of equivalent programs at other similar institutions.

4- The program coordinator/manager or Dean submits annual budget proposals setting out detailed program requirements, and he follows up necessary adjustments after those proposals have been considered.

5- Providing a special budget for the department to support the program and its development.

6- Establishing a committee to determine the needs of the program and submit them to the concerned authorities to estimate the cost.

7- Providing a budget for scientific research in the department and put a specific mechanism to support scientific research in the department.

8.2 Financial Management

The standard of financial planning and management is related not only to the adequacy of funding, but also to the efficiency and flexibility of financial management by program managers. For this flexibility and for appropriate accountability, specified levels of expensesshould be provided to be authorized by the program manager, and it is subject to reporting and accountability requirements. Regular management reports should be provided to the program manager from the financial accounting system to allow monitoring of expenses in relation to planning budget.

The Vice-rector's authority is delegated to the General Manager of Finance Department regarding the supervision of all financial affairs and the application of all the governmental accounting procedures. The Finance Department manages the University's independent budget, which include endowments, research chairs, etc.). The Accounting unit of the Financial Directorate must ensure that funds provided for a particular purpose are used mainly for that purpose; the Division also verifies that this has occurred. A quarterly report is submitted by the Finance Directorate concerning expenses and commitments which outlines differences between projected and actual expenses; individual reports are prepared for each organizational unit as well as for the University.

It will be achieve through:

1- Delegation from authorized person must be given to the program manager for effective program administration.

2- Any financial delegations should be clearly specified and accompanied by appropriate accountability and reporting processes.

3- The program manager/head of department must be involved in the budget planning process.

4- The accounting system provides accurate and continuing monitoring by the program manager of expenses and commitments regarding budgets.

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5- If there is a conflict of interest exists, either actual or perceived, the person authorized should declare his interest and refrain from participation in decisions.

6- Financial procedures should be sufficiently flexible for long term planning to avoid various expenses or disincentives at the end of the year.

Evaluating Majmaah university's financial planning and management system showed that the University budgeting and resource allocation process reflects its mission and goals guided by its five-year plan. The government allocated budget is the largest component of the University's income. However, the University is encouraged to develop strategies to diversify revenue through a range of activities and to reduce its dependence on a single funding source. The University monitors cash ratios continuously through the distributed books by Finance Directorate. There are also variations between colleges and departments in terms of their allocations (salaries, wages, and allowances). The University financial affairs are subject to internal financial auditing through the auditing division of the Finance Directorate, and external financial auditing processes through the Ministry of Finance and General Auditing Bureau in Saudi Arabia.

At the College level, most of the funding comes directly from the university through various sources. All salaries are paid directly to staff. For all IT related services and equipment's, this is funded from the IT deanship at the university. For all e-learning material it is funded through the learning deanship. Similarly, most faculty development activities are funded through the deanship of faculty development. Other daily expenses are covered by the university through a special budget.

Strengths

1) Majmaah University is getting great deal of support from the government, and it gets a comparative advantage compared with other universities.

2) The University financial affairs executive rules are comprehensive and written in clear and practical terms. The University financial affairs organizational structure ensures a clear division of work.

3) The University financial planning process is linked with its Mission and its goals, and is guided by the University's practical plan.

4) The University employs an efficient internal and external financial auditing process which ensures good control and monitoring of the financial affairs.

Areas Requiring Improvement

1) Mathematics Department does not have financial independency to cover its day-to-day financial expenses. It is also consistent with Majmaah University modern approach for strategic development and planning. The University should undertake restructuring of its financial planning and management system in order to delegate some level of financial independency of the colleges.

2) The financial affairs should initiate formal cost-benefit and cost-effectiveness analyses for proposed projects and programs.

3) The financial planning processes should include independently verified risk assessment.

4) Establishing a financial benchmarking process at college and university level.

Priorities for action

Majmaah University should delegate some level of financial independency to the Department of mathematics in order to cover its annual operational expenses

1) Restructuring of Majmaah university's financial planning and management system in order to delegate some level of financial independency to the college through items of its annual operational expenses budgets.

2) Initiate formal cost-benefit and cost-effectiveness analyses for proposed projects and programs.

Standard 9: Employment Processes

(Overall Rating: ***)

Teaching and other staff must have the knowledge and experience needed for their particular teaching or other responsibilities and their qualifications. Experience must be verified before hiring them. New teaching staff must be thoroughly notified about the program and their teaching responsibilities before they begin. Performance of all teaching and other staff must be regularly evaluated, with outstanding performance recognized and support provided for professional development and improvement in teaching skills.

Most of the responsibility for activities in this standard related to college administration rather than program administration. However regardless of who is responsible, the quality of resources, financial planning and management can affect the quality of the program. In this section comment should be made on employment matters that affect the quality of the program regardless of who manages them or determines the policies that affect them. These matters include at least hiring qualified faculty, their participation in relevant professional development and scholarly activities, and their preparation for participation in the program.)

1-Explanatory note about recruitment and other employment activities is related to this standard.

In line with King Saud University plan, and international standards for the recruitment, MU followed the same strategy. It aims to develop the performance of an employee or a member of the faculty or in the selection of faculty members, particularly non-Saudis, and it trained him on the latest modern technology, Moreover, it sends them to the local, regional and international conferences to develop their career. The university assesses regularly and give reward to distinguish outstanding work.

The Department of Mathematics has made considerable progress in terms of improving the quality of its workforce by providing personal and professional development opportunities through workshops. Workshops offered regularly by the Deanship of Skills Development; faculty members are also encouraged to attend international conferences and/or training abroad. KSU as a whole has progressed in rewarding outstanding academic and administrative performance by introducing and publicly announcing outstanding performance awards.

Key performance indicators

- Distributions of faculty members leaving the Department in the last year for reasons other than age retirement.
- Distributions of faculty members participating in professional development activities during the past year.

2. Describe processes used to consider quality of performance in relation to this standard.

The members of Development and Quality Committee and Assessment and Accreditation Committee were involved in evaluating this standard. In order to achieve their goal they did the following:

1. Reviewed the University KSU based on this standard

2. Reviewed all employment policies and procedures

3. Reviewed all the faculty staff statistics from the College

4. Reviewed all the documents of the faculty improvement unit

5. Discussed with the Vice Dean all the issues and difficulties concerning the Employment process of distinguished faculty.

Report on subsections of the standard:

9.1 Recruitment

MU has clear formal recruitment processes. These processes deal with the employment of Saudi and non-academic staff. On the university website the detailed processes of recruitment are announced. At the departmental level, the Alumni affairs and employment committee discuss every candidate and document their recommendations. Then this has to be approved by the Department Council, then by the College Board, and by the Committee of Teaching Assistants and Lecturers headed by the Vice Rector for Graduate Studies and Research. The final decision is for the Scientific Council. For non-academic staff, the process also starts at the departmental level but goes directly to the Dean and then to the personnel department in the college and to the university personnel department.

Positions are publicly advertised at local newspapers, and the University website. Some professional recruitment services have also been used. The advertisements include job title and means to apply. Detailed description of the job, selection criteria, indicators of performance, and processes of performance evaluations are not consistently included in the advertisements. However, they can lookup in the regulations of the Ministry of Higher Education or the regulations of the Ministry of civil service on the University website. Moreover, the University has established several programs and units to recruit distinguished professors and scholars, including Nobel Prize holders. The University is strict about verifying the standing and reputation of the institutions from which degrees were obtained. The process undoubtedly includes checking if the institution is recognized by the Ministry of Higher Education.

Careful attention is given to hire qualified and skilled faculty staff. Final decisions for professorial-level recruitment are made by the Scientific Council. All other recruitment reconfirmed by the Committee for Teaching Assistants and Lecturers. There are a number of specialized units and programs to recruit well-known scholars and researchers. A process of qualifications and reference checking is in place. For the last three years, orientation has been provided at the University level for new faculty members at the beginning of each academic year by the Deanship of Skills Development. Colleges provide additional orientation to new faculty members.

In 1433/1434H, the number of full-time faculty members at Department of mathematics was 19.However, as pointed out in Table: 9.1.1 two of them left the Department in the past year for reasons other than age retirement.

Table 32: Proportion of faculty member leaving the Department in the past year

		-
Number Faculty of members as in 1433/1434H	Number of leaving	rate of faculty member leaving the Department
19	-	-

Percentage of faculty member leaving the Department in the past year for reasons other than age retirement

9.2 Personal and Career Development

MU provides its employees with opportunities to build satisfying careers to enable them to contribute to the University's mission. It does this by making available career and personal development opportunities to faculty, teaching and administrative staff. In this regard, MU has established a Deanship for Skills development which organizes workshops and seminars, and also identifies the needs of faculty and staff while planning strategies to meet the identified needs. Saudi and non-Saudi faculty members are encouraged to attend national and international conferences in their own areas of expertise. In fact, it is expected that all faculty members will participate in some form of career development annually and, as a minimum, it is expected that they will remain up-to-date in their specialist field and sustain a satisfactory level of performance.

An orientation and induction Program for new faculty members has been provided in MU by the Deanship of Skills Development. This Deanship also monitors participation in skills development activities, and faculty is expected to attend a minimum of two workshops each academic year. In fact, a new regulation, announced by the Rector, states that those who fail to meet this requirement may not be eligible to receive the teaching allowance. In contrast, those attending more than two workshops are given the opportunity to be nominated for other special workshops or conferences. Feedback has been sought via surveys regarding the timing of these activities in order to increase participation. The Deanship of Skills Development provides activities covering a wide range of skills: for example, workshops designed to enhance the personal, technical and professional skills of both faculty and staff. Although these workshops are evaluated by participants, no feedback from the Deanship of Skills Development regarding the impact of these activities on the performance of staff and faculty is currently available. In 1433/1434H the total number of faculty members who participated in skills development programs was 15. (Annual Report of Deanship of Skills Development).

Performance criteria for evaluation at MU are clearly specified; they have recently been published on the website of the Deanship of Faculty and Personnel Affairs, and a standard form for performance evaluation is used. This form is familiar to all teaching and other staff and is usually completed confidentially by the department chair once a year. The evaluation criteria used for faculty members' accord greater weight to research than to other important faculty roles. In the Department of Mathematics, if an employee's performance is judged unsatisfactory, he/she is given the opportunity to improve his performance based on the weakness(es) noted out on the evaluation form. Although the evaluation is not usually discussed with employees, faculty members have the right to see their evaluation report and the administration emphasizes that all evaluation reports must now be signed by the employee before the report is submitted to the Deanship; staff have the right to make a formal complaint if they are not satisfied.

MU has recently adopted a policy to reward outstanding academic and administrative performance with such recognition of merit being announced on the University's website and in MU's newspaper; the criteria for choosing winners are clearly documented on the website of the Deanship of Quality (http://mu.edu.sa/en/colleges/college-science-al-zulfi/alumni-unit) and Personnel Affairs (www.mu.edu.sa).

As another form of reward, laptops were provided for those who launched their own personal homepages on the University's website while those who are excellence in teaching are rewarded and recognized at a department, college and institutional level. In addition, faculty members are financially rewarded if their research is published on international journals.

Lecturers and teaching assistants in Department of Mathematics are given considerable assistance by the University via support unit. It helps them to get acceptance at universities and it provides information to aid them in pursuing their education by activating cooperation agreements which exist between foreign universities. Also, junior teaching staff is introduced to other well-recognized research and education institutions.

3. Evaluation of employment processes for the program.

Summary of strengths

1) There is a well-developed employment process.

2) Credentialing of all employees is checked and verified.

3) The college has been able to attract distinguished staff with high international scale.

4) Faculty members at The Department of Mathematics participated in skills development programs.

Areas for further improvement

Mathematics Department

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Zulfi, Faculty of Sciences

1. Suitable arrangements should be made to conduct interviews of all applicants.

2. Faculty and staff should be informed formally (in writing) of what is expected from them and how exactly this will affect their evaluation.

3. Confidential consultations are needed on regular basis (at least once a year) to discuss work performance and the means to attain expectations.

4. Faculty and staff evaluations should be in detailed and reflect reality.

5. Evaluations should be accessible to all faculty and staff.

6. The Department of Mathematics realized the lower participation of faculty members in The Mission statements of the Department of mathematics on three pillars; Education, Research and Community Service. Research as one of the main pillars of the mission of the College of Science has reflected in at least four of its strategic priorities, namely:

Strategic priority 1: To Achieve higher Education, Scientific Research, andCommunity Service.

Strategic priority 3: The Optimal Use of Resources and Modern Technology

Strategic priority 6: To Establish Effective Partnerships Locally and Globally.

Priorities for action

Suitable arrangements should be made to conduct interviews of all applicants

The Department of Mathematics should has a systematic plan to involve all faculty members and supporting staff in skills for development programs.

Standard 10: Research

(Overall Rating ***)

All faculty members will participate in some form of career development annually and, as a minimum, it is expected that they will remain up-to-date in their specialist field. Those developments should be reflected on their teaching. Teaching Staff in post graduate programs or higher degree research students must be actively involved in research in their field. Facilities and equipment must be available to support the research activities of teaching staff and post graduate students to meet these requirements in areas relevant to the program.

Staff research contributions must be recognized and reflected in evaluation and promotion criteria. (Expectations for research will vary according to the nature and mission of the institution and the level of the program (ex. College or university, undergraduate or postgraduate program). In this section, comment should be made on the extent and quality of research activities of faculty teaching in the program, and on how their research and other current research in the field are reflected on teaching.)

1. Explanatory note about nature and extent of research activities associated with the program or carried out by staff teaching on it.

Research Laboratories:

In each department of the College of Science, there are research laboratories that are fully equipped with the latest and most sophisticated equipment and experienced staff and technicians to accomplish the mission of the College in research. The required Laboratories for the Department of mathematics are the Computer Labs.

Table 33: List of research laboratories in the Department of mathematics

Department	Research Labs
Mathematics	One Computer Lab includes 25 computers

MU has signed collaborative agreements with 3 well known scientists in the field of mathematics through "Distinguished Scientist Fellowship Program (DSFP). These professors collaborate with faculty members in the domain of research as well as introducing several seminars in the Department every year.

2- Description of process for preparation of report on this standard

The members of the postgraduate Study and Research Committee were responsible for the evaluation and preparation of the report on this standard. To achieve their goal, they started

Mathematics	Department
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their task by reviewing:

Involvement of the teaching staff at the Mathematics Department:

Most academic staff is graduated from world top universities. Researchers are familiar with research methodology and techniques. In 2012 (1433H) full-time faculty of the department published 1013(1434H) manuscripts in ISI indexed journals. The ratio of ISI publication per fulltime (staff)

Table 34: Total articles, number of faculty of Science in each department and ratio of publications

Department	Total Articles	No. of Staff members	Ratio
Mathematics	77	15	1.026
Physics	70	14	1.0
Computer	31	13	0.476
Science			
Medical	62	13	0.954
Laboratories			

Total articles, number of faculty of Science in each department and ratio of publications for each faculty in each department in 2008-2013.



Figure 78: Ratio of publications for all Departments

Mathematics Department

Zulfi, Faculty of Sciences



Figure 79: Total articles for each department at College of Science in: (2008-2013)

In 1433H, the Faculty of Science and its researchers has great participation of the University Awards for outstanding in scientific publications. The college gets the first place in the scientific productivity in MU. The Department of Mathematics came second.

MU encourages and supports the junior Saudis faculty members to establish and to develop their research programs. "Pioneer Program" is one of the initiative programs supported by Deanship of Scientific Research that aims to generously support the junior faculty members to carry out high-quality research projects evaluated and reviewed by national and international peer reviewers.

Research Deanship states that the priority of the Deanship is to encourage faculty members to conduct research and to find ways or channels to encourage individuals and institutions to support and fund their research projects.

University of Majmaah support for scientific research is very limited, and it does not encourage faculty members to attend international, local and regional conferences, and it doesn't have graduate programs for MSc and PhD students.

Involvement of the students:

The MU is not providing support for research projects for University students. There is not enough time, and the library doesn't have references or book to do a remarkable project. Moreover, the university doesn't support scientific research, and doesn't have a program for master or Ph.D. as it is developing university

only Five members are working on research projects are: Dr. Abdel Moneim Mejahid in 1431-1432H, Dr. Khaled El-helow+ Abdel MoneimMejahid in 1432-1433H, A Abdel Nasser Gareeb, Salah Khafagy, Dr. Mohamad Herzalla in 1433-1434H.

10.2 Research Facilities and Equipment

Basic research requirements in the Department are the computer labs, PC in the staff offices, e-databases and e-journals. The Central Library subscribed to a large number of databases and scholarly e-journals which can be accessed through the libraries.

Security policy and arrangements are carried out in coordination with the department of security and safety of the university. In order to accomplish these objectives, the following safety measures are usually taken in all facilities:

1-Security: the Department of Safety and Security provides security systems to secure the facilities, Cameras are available in the facilities for 24 hours.

2-Fire Safety: Fire evacuation policy and fire drills are practiced in all laboratories,

3-First Aid: First aid kits are available in all laboratories

4-Personal Protective Equipment: Laboratories are equipped with personal

Protective equipment according to the needs in every laboratory such as coats, masks, safety goggles, safetygloves, earmuffs, and helmets.

5-Others: The College also has emergency plans, safety signs, emergency exit, signs and laboratory safety manuals. Finally, safety aspects are taken into consideration when purchasing new machine and equipment.

All equipment is regularly maintained through a very detailed system supervised by the college through workshops, and the website of the college of Science: These workshops are Carpentry workshop, mechanics workshop, electronics workshop, glass workshop, blacksmith shop, plastic workshop. The electronics workshop is concerned with the maintenance of all electronic devices. A form should be filled out to perform the maintenance for any device.

In general, funding for research is achieved in the Mathematics Department through one of the resources shown in the following Table

Sources	Department	Funding in Riyals	No. of projects Funded	Date
Majmaah University	Mathematics	125000	5	1431-1434H
	Physics	50000	2	1431-1434H
	Computer Science	25000	1	1431-1434H

Table 35: Sources for research funding and approximate funding

In spite of all the above, research infrastructure needs more improvement in the college especially in terms of supporting staff. Jobs for researchers, research assistants, and lab technologists have been hired.

3. Evaluation of research activities associated with the program and of staff teaching in it.

Strengths

1-The Department of mathematics has outstanding researchers in pure and applied mathematics.

2- The department has excellent national and international researchers.

5- The research process is supported by the University through the Deanship of Scientific Research as well as several supporting programs.

Areas for improvement

1-A research strategic plan for the future should be identified as a main priority for the Department of Mathematics.

2-The research infrastructure needs more improvement. And needs electronic databases.

3-In general, research must be encouraged and enhanced as the number of ISI publications in the Department doesn't match its great potential.

4- There should be development Strategies to get benefit from the experience of faculty and postgraduate students in providing research and development services to the community, and got financial returns for the college..

Priorities of action

1-A research strategic plan for the future should be identified as a main strategic priority for the Mathematics Department.

2-Continue support and enhancement of the students and researcher.

3-it starts a new program to encourage research and to increase quantity and quality ofcurrent research.

4- The research infrastructure needs more improvement, and needs electronic databases.

Standard 11. Relationships with the Community

(Overall Rating ***)

Significant and appropriate contributions must be made to the community based on the knowledge and experience of staff and the needs of the community for that expertise. Community contributions should include both activities initiated, and it should be carried out by individuals arranged by the institution or by program administrators. Activities should be documented. Staff also should contribute appropriately within the institution.

1-Explanatory note about community activities carried out in connection with the program.

The Mission of the Department of Mathematics emphasizes its role in community service as it is one of its three main goals beside teaching and research. The Department serves the community through different channels: the department, and the individual, and Mathematics Department members.

The community services provided by the program include participating and organizing a number of conferences, workshops, providing consultancies services for public and private sector and courses. Faculty members of the Department of Mathematics serve as part-time consultants in ministries, public and private organizations.

Report on subsections of the standard:

- 1- Reviewed the College and University strategic plan.
- 2- Reviewed the College annual report for 1433/1434H.
- 3- Reviewed the advisory board document.

11.1 Policies on Community Relationships

Community services are part of the main criteria for promotion in MU. Main community service contributions have to be clearly mentioned in the promotion. Accordingly, each staff is considered as an integral part in promotion. In addition, each year, each faculty staff fills out an academic activity which includes all the academic, scientific, community services and activities of the staff in the last year. Furthermore, the mission of the Department of mathematics emphasized the importance of community services as a means of strengthens the relationship between the program and the outsider community through education, research and other services.



Identification of policies on community relations

Where:

1.56% of the faculty members must identify the services provided by the program, and it should be defined in a way that reflects the skills and abilities of teaching staff in the program, within which the institution operates.

2.55% agree that teaching staff contributions to the community should be reported annually.

3. 56% agree that community contributions should be included in promotion criteria and staff assessments.

4. 51% agree that program initiatives in working with the community should be coordinated with responsible units in the institution to avoid duplication and possible confusion.



Figure 80: Members to assess the level of performance

11.2 Interactions with the Community

Outreach and cooperation with the community is integral part of Mathematics Department's in public service. Community service is articulated in the statement mission of the program as a commitment to work "closely and collaboratively with other organizations at programmatic and individual levels to develop common goals. The objective of the community service at Department of mathematics is to enhance and expand opportunities for its students, and it becomes in community service activities. It also emphasizes the role of the program in the community, and in cultural and educational activities.

Consultation form is an important component of Department of Mathematics service contribution to the community. Faculty members are actively engaged in community enhancement and meaningful efforts; for example, service on local boards, presentations and programs sponsored by the department for Public Service. Activities also include lectures and presentations. Students often join university professionals in these activities, they give the school students a chance to apply the skills and knowledge they have acquired and to develop contacts that may result in future careers.

The Department of mathematics Advisory Board has been an instrument in developing community relations. The Board composed of citizens from the regional community. Although, the Advisory Board is newly established, the aim is to serve as a channel for the exchanges of ideas and information between the Department and the public and private sector that employs or needs the services at Department of mathematics. They are also helpful in expanding internship opportunities in specific trends and changes from the world outside the Department. The advisory board helps in reviewing the program and makes recommendations
for modifications and improvements. This will keep the Department informed about the quality of its programs and allows the program itself to measure its needs.

A number of the Department of Mathematics faculty members hold leading positions in various public organizations:



Identification of interaction with the community

Where:

1- The figure shows that 48% of faculty members agreed that the faculty is encouraged to participate in seminars that discuss community issues.

- 2- That 44% of faculty members has agreed to be a relationship between the program, the local industrial sector and employers in professional programs. Relationships should be established with local industries and employers to assist program.
 - 3- That 47% of faculty members has agreed to invite local employers and members of professions associated with the program to join appropriate advisory committees considering programs and other institutional activities.
- 4- 54% of faculty members call for direct contact between school in the region and department. The faculty can offer assistance and support in areas of specialization, providing information about programs, activities, career opportunities, and arranging enrichment activities for the schools.

5- 55% of faculty members call for direct contact with alumni, keeping them informed about program developments, inviting them to participate in activities, and encouraging financial and other support for new initiatives.

6- 27% of faculty members agreed that we can ask for funding support from individuals and organizations in the community for research and other developments.

7- 55% of the members agreed that records should be kept about community service that is established by individuals, centers or other organizations within the department. These records should be kept in a central database in the institution.



Figure 81: Members to assess the level of performance

Table 36: Proportion of Full time faculty members actively engaged in community service activities.

Mathematics	Number of Mathematics	Number of	Proportion of
Department	members engaged in	Department	Department staff
	community service	staff	engaged to community
	activities		service activities
Numbers of	Three in 1434H	Nine in	
staff		1435H	

In general, the Mathematics program serves the community through different channels

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including:

1-The Department organized with cooperation with Saudi Association for Mathematical Sciences an internal conference on "teaching mathematics in general educational stages".

Teaching all the mathematics courses required by other departments in the college (like Statistics, operations Research and Physics)

2. Evaluation of the extent and quality of community activities associated with the program and of staff teaching in it.

Strengths

- Part of promotion decisions at Department of Mathematics are based on evaluations of faculty contributions to teaching, research, and community service.
- The Department of Mathematics presently offers educational services to the surrounding community and region. And we expect marked growth in the near future.

Areas for improvement

- 1- There is no plan for all community activities at the Department of Mathematics
- 2- The Mathematics Program should improve communication between the Program and its surrounding community.
- 3- Mathematics Program should develop appropriate assessment instruments to demonstrate and enhance the effectiveness of the program's community outreach efforts.
- 4- The Mathematics Program should provide educational and innovative programming for its community.
- 5- More of the Department's alumni are needed.

Priorities of action

- 1. Finalize the community needs assessment plan.
- 2. Put an effective alumni program

J. Review of Courses

Describe processes followed in reviewing courses. (Ex. Surveys of graduates, faculty, or members of the profession, analysis of student course evaluations, review of course and program reports, interviews with faculty, comparison with similar programs elsewhere, consultancy advice, etc.)

1. Describe processes followed in reviewing courses.

All courses have course specification formulated in NCAAA template. Course specification document includes: general information about the course, the course content, general and specific objectives, methods of teaching and assessment, learning resources, facilities requires and finally evaluation and improvement processes. These documents are written by the course coordinator after consultation between all faculties participating in the course. The course coordinators are trained by Dean of development and quality unit. The course specifications are posted on the website to be available for the students and distributed to all people involved in teaching the course.

At the end of the course student surveys (overall course satisfaction and specific faculty evaluations) are carried out by the students. Policies and procedures for students' evaluation for the courses and staff members were developed. The response is voluntary. All results are analyzed by the Department (Assessment and Accreditation Committee). Results of students' evaluations of faculty are presented in the annual program report.

At the end of the course, the course coordinators prepares the course report that has: general information about the course, the course delivery, effectiveness of planned teaching strategies for intended learning outcomes, students' result, any difficulties in resources availability or administration issues, course evaluation and finally planning for improvement of the course. Each course organizer has been trained to fill out this report. All course reports are received and analyzed by the Assessment and Accreditation Committee. A copy also goes to the student's Academic Study Plans committee and the Vice Dean for Academic Affairs.

The course reports are discussed in the council of the department meeting, and comments sent to the Assessment and Accreditation Committee for any changes or improvements in the course based on the course report. Any major changes in the course must be reflected in the course specifications again.

Course Evaluations

	Mark/5	NCAAAstars
Year1Courses	Not applicable(PYP)	
Year2Courses	4.04	4
Year3Courses	4.6	4
Year4Courses	4.7	4

Table 37: Summary of overall students' satisfaction rate in all courses

Course	Strongly	Agree	Neutral	Disagree	Strongly	Overall	N=
	agree	-		_	disagree	Rating/5	
Math 482	80%	10%	0	0	10%	4.5	9
Math 326	90%	0	10%	0	0	4.8	13
Stat 202	70%	10%	0	10%	10%	4.2	8
Math 210	40%	50%	0	0	10%	4.1	6
Math 343	70%	20%	0	0	10%	4.3	7
Math 102	50%	40%	10%	0	0	4.4	2
Sta 438-z	80%	20%	0	0	0	4.8	6
Math 242	40%	20%	10%	0	30%	3.4	20
Math 203	50%	20%	10%	0	20%	3.8	19
Math 201	80%	10%	0	10%	0	4.6	2
Math 204	60%	30%	0	10%	0	3.9	22
Math 450	70%	20%	10%	0	0	4.6	10
Mat 324-z	100%	0	0	0	0	5	6
Mat 221	60%	30%	0	0	10%	4.3	24
Math 353	50%	30%	10%	0	10%	4.1	22
Mat 321-z	80%	10%	0	0	10%	4.5	24
Math 472	90%	0	10%	0	0	4.8	13

Table 38: Summary of overall students' satisfaction rate in a sample of courses



Figure 82 : Shows students overall rating on the quality of their courses.

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	Majmaah University (MU)	King Saud University(KSU)					
Years	Mark/ 5	NCAAA stars	Mark/5	NCAAA			
				Stars			
Year 1 Courses	Not Applicable(PYP)		Not Applicable				
			(PYP)				
Year 2 Courses	4.04	4	3.2	3			
Year 3 Courses	4.6	4	3.65	3			
Year 4 Courses	4.7	4	4.85	4			

Table 39: Comparison between MU and KSU in ' satisfaction rate in all courses Summary'

Comparison between MU and KSU in summary of overall students' satisfaction rate in all courses Summary

3. Statistical results by department of the second semester 32/33

Course	Enrolled	Examined	Passed	Passing	A+	Α	В	В	С	С	D	D	F
code				rate			+		+		+		
MAT 110	15	11	7	64%	3	0	1	2	0	0	0	1	4
MAT 110	43	33	27	82%	3	3	1	1	5	1	3	10	6
MAT 101 –	5	3	2	67%	0	0	0	1	0	0	0	1	1
Z													
MAT 102 – Z	16	15	10	67%	0	0	0	0	1	1	1	7	5
MAT 107 - Z	15	15	13	87%	0	0	0	1	3	4	1	4	2
MAT 201 – Z	2	2	1	50%	0	0	0	0	0	0	1	0	1
MAT 202 – Z	1	1	1	100%	0	0	0	0	1	0	0	0	0
MAT 203 – Z	12	12	11	92%	0	0	0	0	0	0	6	5	1
MAT 204 – Z	22	22	17	77%	0	0	0	2	2	3	3	7	5
MAT 224 – Z	3	3	2	67%	0	0	1	0	0	1	0	0	1
MAT 242 – Z	1	1	1	100%	0	0	0	0	0	0	0	1	0
MAT 316 – Z	5	5	5	100%	0	1	0	0	0	1	0	3	0
MAT 324 – Z	6	6	6	100%	0	0	0	0	2	2	2	0	0
MAT 331 – Z	2	2	2	100%	0	1	0	0	0	1	0	0	0
MAT 343 –	2	2	2	100%	0	0	0	0	0	0	2	0	0

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Course	Enrolled	Examined	Passed	Passing	A+	Α	В	В	С	С	D	D	F
code				rate			+		+		+		
Z													
MAT 350 – 7	1	1	1	100%	0	0	0	0	0	1	0	0	0
MAT 353 –	3	3	2	67%	0	0	0	0	0	0	0	2	1
Z													
MAT 356 – Z	6	6	5	83%	0	0	0	0	0	1	1	3	1
MAT 370 –	7	6	5	83%	0	0	0	0	2	1	1	1	0
	C	C	4	679/	0	0	0	0	0	0	0	4	2
7	0	0	4	0770	0	0	0	0	0	0	0	4	2
MAT 382 –	2	2	1	50%	0	0	0	0	0	0	0	1	1
2	47	45	4.2	000/	0		-		2	2	2	2	2
MAT 423 – Z	17	15	12	80%	0	1	1	1	2	2	3	2	3
MAT 444 – 7	16	16	16	100%	0	0	0	0	3	3	5	5	0
MAT 475 –	11	11	8	73%	0	0	0	1	2	1	2	2	3
Z													
MAT 482 – Z	16	16	14	88%	0	1	1	0	3	1	2	6	1
MAT 483 –	11	11	10	91%	0	0	0	1	1	1	2	5	1
	21	21	17	910/	0	1	1	0	1	2	1	11	4
Z	21	21	1/	81%	0	T	T	0	T	2	T	11	4
MAT 499-Z	22	22	22	100%	1	2	2	4	6	1	2	4	0
MATH 201	7	7	6	86%	1	0	0	1	0	0	1	3	1
MATH 203	19	17	14	82%	2	1	0	2	1	3	0	5	3
MATH 204	25	25	19	76%	0	1	0	2	2	2	2	10	6
MATH 205	8	8	6	75%	1	0	0	0	0	1	1	3	2
MATH 210	8	8	8	100%	0	0	1	1	2	0	1	3	0
MATH 242	19	19	16	84%	1	1	1	1	1	3	3	5	3
MATH 243	11	10	8	80%	0	1	0	2	1	2	0	2	2
MATH 321	7	7	7	100%	0	1	2	0	1	2	1	0	0
MATH 326	17	17	17	100%	0	1	4	2	4	2	2	2	0
MATH 333	4	4	4	100%	0	0	0	0	0	2	1	1	0
MATH 343	31	31	31	100%	0	1	0	1	2	13	7	7	0
MATH 351	14	14	14	100%	0	2	0	1	3	0	3	5	0
MATH 353	10	10	10	100%	0	3	0	2	2	0	1	2	0
MATH 382	14	14	13	93%	1	1	0	2	1	0	2	6	1
MATH 402	38	38	37	97%	8	4	2	5	1	4	4	9	1
MATH 404	19	19	19	100%	4	4	2	2	1	3	0	3	0
MATH 411	26	26	21	81%	1	0	2	2	3	3	5	5	5
L	1			1		ı				1	1	1	

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Course	Enrolled	Examined	Passed	Passing	A+	Α	В	В	С	С	D	D	F
code				rate			+		+		+		
MATH 422	15	15	15	100%	2	1	2	2	1	3	2	2	0
MATH 444	14	14	14	100%	0	0	0	1	1	0	5	7	0
MATH 471	10	10	9	90%	0	0	1	1	1	1	1	4	1
MATH 472	13	13	10	77%	2	0	1	1	1	2	0	3	3
MATH 482	12	12	12	100%	1	1	1	3	1	2	1	2	0
MATH 483	15	15	13	87%	0	1	5	0	3	3	1	0	2
MATH 484	16	14	13	93%	1	0	0	2	3	1	4	2	1
MATH 499	9	9	8	89%	0	0	1	0	1	1	3	2	1
MTHP002	2	0	0	0%	0	0	0	0	0	0	0	0	0
OPER 351	16	16	14	88%	0	0	0	2	4	3	2	3	2
STA 101-Z	20	16	13	81%	1	2	3	0	2	3	1	1	3
STA 224-Z	3	3	3	100%	0	1	0	0	1	1	0	0	0
STA 438-Z	21	21	21	100%	1	1	1	5	4	1	7	1	0
STAT 203	14	14	14	100%	2	1	3	0	2	6	0	0	0
Gets 202	24	22	22	100%	0	З	5	5	5	2	2	0	0
Math 202	23	18	13	72%	0	0	0	0	1	4	5	3	5
Math 231	19	17	17	100%	0	2	3	1	1	5	3	2	0
Math 273	19	17	12	71%	0	0	2	0	3	0	3	4	5