Zulfi, College of Science
Bachelor of Science in Mathematics

Majmaah University
جامعة المجمعة

Self-Assessment Report for International Accreditation

Bachelor's degree program in

Mathematics

Editors: **Dr. Ahmed Elmoasry,**
Dr. Ahmed Zedan,
Prof. Dr. Mohamed Abdel Hakeem

Zulfi, 2014

"Adopt as your fundamental creed that you will equip yourself for life, not solely for your own benefit but for the benefit of the whole community."

" يجب أن توقن أنك تعد نفسك للحياة ؛ ليس من أجل المنفعة الخاصة بك وفقط ؛ ولكن لصالح المجتمع ككل".

Self-Assessment Report for International Accreditation

Bachelor's degree program in Mathematics

Editors: Dr. Ahmed Elmoasry,
           Dr. Ahmed Zedan,
           Prof. Dr. Mohamed Abdel Hakeem

Zulfi, 2014

Contents

List of Tables

1. Formal Specification

Name of the program (original language)	بكالوريوس العلوم (رياضيات)
Name of the program (English translation)	B.Sc. in Mathematics
Final degree	Bachelor of Science in Mathematics
Standard period of study	4 years ,8 semesters
Credit points (according to ECTS)	137 credit hours
Type (several can be indicated)	Full time
Website of the Higher Education Institution	www.mu.edu.sa
(first time) program start date within the academic year	17/5/2005
Intake rhythm	Fall semester
Expected intake number of students	150 students
Amount and type of fees/charges	Free of charge
For the AC-Seal (Germany): classification as consecutive/further education (for Master's degree programs)	consecutive/further education / n.a.
For the AC-Seal (Germany): (optionally only for Master's degree programs)	application/research orientation/n.a.
Faculty/Department	Zulfi, Faculty of Science- Mathematics Department
Official contact person for publication on the web	Prof/Adel Mohamed Zaki
Telephone	00955590619862
E-Mail	adelmzaki@hotmail.com a.zaki@mu.edu.sa
Fax	00 966-16-404 40 44
Mail	KSA - Zulfi 11932 College of Science in Zulfi Po.Box:1712
Re-accreditation	No
Last accreditation issued by	No
Duration of the last accreditation	

The site of execution of the Degree Program in Mathematics is the Department of Mathematics at Zulfi, College of Sciences Majmaah University. The Department of Mathematics belongs to the Zulfi, College of Sciences that operates under the administration of Majmaah University. Zulfi, college of Sciences brings together the Mathematics related education and research at Majmaah University. Zulfi, college of Sciences coordinates three degree programs Mathematics, Mathematics, and Computer Sciences. Majmaah University is one of the largest education and research organization in KSA.

1.1   Type

Studies are full time and take place on weekdays from 0800 to 1600 hrs. Courses can last from two to three semesters per year. However, the university also offers courses as intensive courses in the summer semester, but Mathematics does not currently offer any intensive studies as a part of the regular curriculum. Most courses are offered every semester. All the courses details are given in the module descriptions available in the study guides. For students, 75% attendance is compulsory. Courses use study and teaching portals, smart board and whiteboard which facilitate self-study and make distance learning a possibility.

1.2   Final Degree

University education is governed by the universities act **(2685/23 M/8)** (**Appendix MU01**). The degrees to be awarded are Bachelor of Science in Mathematics of Zulfi College of Science. The Universities Act **(9683/MB) 8/5/1426 H** (**Appendix MU02**) and the Government Decree on University Degrees **(7205/MB) 3/9/1430** H (24/8/2009 AD) (**Appendix MU02**) grant the right to award these degrees to Majmaah University.

1.3   Standard period of study and credit points gained

The extent of studies required for Mathematics Bachelor degree is 137 credit hours according to Saudi system (equivalent to 239 ECTS credits) including the preparatory year (PY) which requiring 29 credit hours. Note that the system of Higher Education Saudi requires at least 120 (equivalent to 180 ECTS credits) credit hours for bachelor's degree.

The university must arrange the education to enable the student to complete his degree in four years of full- time study (**Appendix MU01**).

1.4   Expected intake for the program

Faculty council makes a proposal to the rector on the student intake for faculty degree program. The number of the expected intake through joint application is decided between the University higher management and the head of departments on yearly basis. The expected intake has been constant, is 150 each year see table 1.

There are several separate variants of entrance to the B.Sc. degree program. The Bachelor's degree program includes applicants who have succeeded in specific competitions in the fields of mathematics and natural sciences.

Table 1-1 Expected intake of students

	Expected intake	Actual intake
2010	150	41
2011	150	45
2012	150	50
2013	150	86

1.5   Program start date within the academic year and first time the program is offered

The academic year of the university starts on mid-August and ends on mid-June. The academic year is divided into three semesters. The autumn semester and the spring semester each include two periods lasting seven weeks. Mathematics Degree Program can be commenced once a year in the beginning of the academic year. The courses being offered are coordinated to ensure this.

Education directed to Mathematics program has been offered since the c o l l e g e was founded in 2006. During the first years, the education was part of the studies in the Department of Mathematics.

1.6   Amount and type of charges

Education leading to a university degree and the entrance examinations relating to student admission shall be free of charge for the student (**Appendix MU01**).

The students of Majmaah University must register each semester for courses.

Appendices

Appendix: MU01. The Statute of the council of Higher Education and Universities (University Act)
Appendix: MU02. Government Decree on Majmaah University & college of Sciences

2. Degree Program: Content, Concept and Implementation

2.1 Aims of the program of studies

The establishment of Majmaah University, which is deemed as a newly established one, came as a result of the decree of the Custodian of the Two Holy Mosques King Abdullah Bin Abdul Aziz Al-Saud and the Prime Minister and Chairman of Higher Education on Ramadan 3rd, 1430 - 24th of August, 2009 to establish Majmaah University along with three other universities in Dammam city, Kharj province and Shaqr'a province.

Majmaah University is established to serve a wide area including Majmmah, Zulfi, Remah, Ghat and Hawtat Sudair. It will also help in achieving the Ministry of Higher Education's objective in expanding the university education across the country. Therefore, Majmaah University will meet the growing number of high school graduates in the region which will reduce the pressure on universities in big cities. Another significant reason for the establishment of Majmaah University is the value it will add to the people of the region in various aspects including social, cultural and awareness service. Inevitably, this shall help in upgrading the level of performance appraisal of government sectors via providing advanced courses and consultations. With regard to scientific research, the University will provide programs of high quality that will be in compatible with the University strategic objectives.

The royal decree no: 194/A on Zul Hejjah 30th, 1430 – 17th of October, 2009 to appoint Dr. Khalid Sa'ad Al-Mugren as the Rector of Majmaah University with higher rank accelerated the development process at the University. Dr. Al-Mugren focused on developing the existence colleges as well as building new ones in order to increase the number of majors that will meet the market demands. The concern of Dr. Al-Mugren is to make Majmaah University a beacon of knowledge and enlightenment that is capable of offering education of high quality.

Majmaah University slogan is comprised of three integrated parts that are based on golden ground. The golden color in the slogan represents the desert of the Kingdom of Saudi Arabia where the Islamic daua'a has started.

Earth

The sign of earth in the slogan represents the tendency of the University to be an international renowned institution.

Book Pages

The book pages to the left side represent the knowledge that the University intends to disseminate in the region. It also represents the future vision of the University to be a source of knowledge for all students.

Leafs of Palm

The three leafs of palm to the right side represent the three phases of the Saudi country.

The selection of palm's leaf is due to its importance as a crucial source for the nutrition and economy of people in this region. The gradation of the dark green color to the light green color refers to the knowledge that the University intends to disseminate in the region.

The educational objectives of the Degree Program in Mathematics reflect the mission of Majmaah University and Zulfi College of sciences

Majmaah University Vision:
To ensure that Majmaah University is a conducive academic environment of high quality capable of providing graduates with promising future to contribute in achieving the sustainable development objectives.

Majmaah University mission:

Majmaah University provides educational and research services via an academic system that is capable of competing with an eye on the market demands and the society partnership.

Zulfi College of Sciences mission:

Scientific excellence through plans and programs enable students to acquire the knowledge and skills needed to compete in the labor market.

There is a greet Consistency between Majmaah University and Zulfi, college of Sciences Mission (**Appendix MPU01**).

Mathematics Program mission:

Development of society through providing graduates, who able to compete in education, scientific research and optimum use of technology. (**Appendices MATH01, MATH02**)

There is a greet Consistency between Zulfi, college of Sciences and Mathematics Program Mission (**Appendix MPU02**).

2.1.1 Aims of the Bachelor's Degree Program in Mathematics

The degree program in Mathematics offers the student's possibilities to acquire competences required in positions where Mathematical expertise is expected, within different operation sectors of the society. The objective of program is that the students will demonstrate adequate knowledge of various mathematics branches.

The B.Sc. degree program in Mathematics provides the students with skills to consider the application possibilities of all mathematics branches within various application sectors.

Central general objectives include providing the community with qualified competent, support E-learning in the department, developed and encourage scientific research, provide consultancy in mathematics to Community and enrich the knowledge of the community to provide distinct programs.

There is a greet Consistency between Zulfi, Mathematics Program Mission and general o*bjectives of the program* (**Appendix MPU03**).

Specialist Goals and Objectives of Mathematics Program

1. *Learning Goal:* **Mathematics majors will develop computational skills in first-year calculus needed for more advanced calculus-based courses.**

Objectives: **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.

2. *Learning Goal:* **Mathematics majors will learn and retain basic knowledge in the core branches of mathematics.**

Objectives: **Students will, during their senior year:**

 a. demonstrate proficiency in calculus;
 b. demonstrate proficiency in linear algebra; and
 c. Demonstrate proficiency in algebra.

3. *Learning Goal:* **Mathematics majors will be able to learn and explain mathematics on their own.**

Objectives: **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.

4. *Learning Goal:* **Mathematics majors will be able to read and construct rigorous proofs.**

Objectives: **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.

5. *Learning Goal:* **Mathematics majors will be able to obtain employment in their area of mathematical interest or gain admittance to a graduate program in mathematics.**

Objectives: **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 KSA; or
 e. Seek jobs in secondary or elementary education will obtain jobs at the appropriate grade level. (**Appendix MATH03**)

2.2   Learning outcomes of the program

Learning outcomes for B.Sc. Program in mathematics are defined and published in the study guide and it is available on the MU web site.

Professors of the B.Sc. Program in mathematics and course teachers have participated in the definition of the learning outcomes. The requirements of the labor market are transmitted into the definition the learning outcomes of the degree program through research projects. Also the requirements of the post-graduate studies have been taken into account in the definition of the learning outcomes.

The correspondence of the ASIIN subject specific criteria and the learning outcomes of the B.Sc. Program in mathematics have been examined in (**Appendix MATH05**).

An overview of the B.Sc. Program in mathematics is compiled for curricular analysis (**Appendices MATH04, ZCS02**).

The Students learning outcomes of the B.Sc. Program in mathematics are defined as follows. After the completion of the Bachelor's Degree Program in mathematics the students have:

Table 2-1: Program Learning Outcomes

Program Learning Outcomes	
Knowledge	a1. Apply fundamentals and concepts of mathematics.
	a2. Apply fundamentals and concepts General sciences and Computer
	a3. Realize Social and ethical values.
Cognitive Skills	b1. Read and construct mathematical arguments and proofs.
	b2. Apply critical thinking skills to solve problems that can be modeled mathematically.
Interpersonal Skills & Responsibility	c1. Work independently and within a team
	c2. Bear responsibility for different situations.
	c3. Realize codes of ethics and their importance.
Communication, Information Technology, Numerical	d1. Communicate a depth and breadth of mathematical knowledge, both orally and in writing.
	d2. Ability to Organize, connect and communicate mathematical and algorithmic ideas.
	d3. Critically interpret numerical and graphical data.
Psycho-motor	e1. Use computer and its applications as an office tool

All students in the Bachelor's Degree Program in Mathematics have the same major subject, Mathematics. (**Appendices MATH01, MATH02**)

2.3   Learning outcomes of the Courses

The learning outcomes of the program are put into practice within the individual courses of the program. The learning outcomes for individual courses are defined in the Program Handbook (**Appendix MATH02**) which is available on the university web pages. The descriptions of learning outcomes of the courses are written by teachers of courses. The **Teacher's Quality** (**Appendix ZCS02**) was used as help to describe knowledge, skills and competences acquired in the courses.

The contribution of the individual course in learning outcomes of the program is indicated in the Objective Matrix (**Appendix MATH03**). The courses' contribution within the learning outcomes of the program were classified in Levels **Introduction (I), Proficient (P), and Advanced (A).** Teachers of the courses participated in the description and classification work. (**Appendix MATH05**)

The B.Sc. degree in KSA is considered as a way to M.Sc. degree studies, introducing students to the scientific thinking and methods. The B.Sc. degree starts with general studies, e.g. Physics and Mathematics, the portion of which is significant in the first study year. According to ASIIN's criteria, the B.Sc. degree in Mathematics consists of (Appendix MATH04):
- **5 %**   **Computer skills,**
- **15 %**   **General sciences**
- **10 %**   **English Language,**
- **70 %**   **Mathematics courses,**
- **3 %**   **Bachelor's Project, and**
- **2 %**   **Practical Training.**

Table 2-2: Percentage of courses

Requirement	Type	C. H. KSA.	ECST	Percentage
University	Compulsory	8	14	5.88%
Faculty	Compulsory	29	50	21.01%
	Optional			
Department	Compulsory	82	140	58.82%
	Optional	9	16	6.62%
Free courses		6	11	4.2%
Bachelor's Project		3	5	2.21%
Field training		0	3	1.26%
Total		137	239	100%
Summary				

The portion of elective studies is 8-10 %. The student may include any courses taught at MU in the elective studies.

2.4 Job market perspectives

The fields of education of the KSA universities are defined by the Ministry of Higher Education. The Board of Majmaah University decides the total number of new entrants. The contents of the degree program are decided by College Council. (**Appendix MU09**)

The content of the Bachelor's Degree Program in Mathematics is determined on the basis of the general requirements concerning the education of Mathematics, the needs and expectations of the industry. The industrial cooperation carried out in the research project provides a forum of information exchange about the needs and expectations of the industry regarding the education of Mathematics.

The amount of employees within the Mathematical research will increase during the next decade. The proportion of university graduates will increase, because the increasing renewable information revaluations require new knowledge and skills in the companies within the application field.

The courses in the Bachelor's Degree Program in Mathematics involve laboratory and project work as well as practical training in order to provide an adequate connection to the professional practice and to prepare the students to commence work in existing or foreseeable professional fields. The courses in the degree structure are also closely linked to the research conducted in the department and provide a path to post graduate studies.

Practical training is included in the Bachelor's program. The total value of obligatory practical training is 3 ECTS credits in the Bachelor's. (**Appendix MATH 01**).

In the Bachelor's degree, most assignments can be included applications from the life. This assignment has a more general purpose. After completing the courses, the student is able to define and explain, what it is like to be working as an employee, and what are the basic rules in working life from the view of an employee.

2.5 Admissions and entry requirements

2.5.1 Entry requirements for Bachelor's degrees

Saudi Universities Act (**2685/23 M/8**) (**Appendix MU01**) rules the entry requirements for the Bachelor's degree. According to the KSA Universities Act, the board of the university decides the number of new students to be selected each year. Rector decides annually the selection process and basis of the selection criteria of the prospective students after hearing the opinion of the faculties.
In practice student selection into the Bachelor's program for KSA secondary school examination graduates is mainly organized by a joint universities application system.

Prospective students applying in the Bachelor's degree in universities are:

1. He should have obtained a general high school certificate or its equivalent from within or without the Kingdom of Saudi Arabia.

2. His high school certificate or its equivalent should not be older than five years. The University Council may make some exceptions if convincing reasons are provided.

3. He should be of a good conduct.

4. He should successfully pass any test or interview assigned by the University Council.

5. He should be medically fit.

6. He should provide a permission for study from his reference, if he works in government or private sector

7. He should satisfy any other conditions the University Council determines, announced during application.

8. He should not be dismissed from any other university for disciplinary or academic reasons. If that became clear after investigation, his acceptance shall be deemed cancelled from the day of his admission.

9. A student dismissed from the University for Academic Reasons may be enrolled in some programs that do not award a Bachelor Degree, as decided by the University Council, or whoever it delegates. This shall not be allowed for the transitional program.

10. Those who already had obtained a Bachelor Degree or its equivalent shall not be admitted to obtain another Bachelor degree. The University Rector has the right for exceptions.

11. A student registered for another university degree or below, shall not be admitted, either in the selfsame university or another.

KSA University applicants have three different quotas where they can be selected in:
1. Success in secondary school examinations;
2. Success in entrance examinations.

The entrance examinations are organized by the joint application procedure. The entrance examination is based on the KSA secondary school curriculum in mathematics, Mathematics and physics. There are three separate examinations. Prospective students must pass the entrance examination to be selected even if there are fewer applicants than places attained. This guarantees minimum knowledge level in science of all selected students. There are no extra aptitude tests in the Bachelor's degree.

Students applying in the Bachelor's Program are not supposed to have any former work experience or industrial placements; neither do they help in the applying process for the Bachelor's Program. Mathematics Bachelor's Program courses are fully taught in English, and thus very good English skills are required.

2.6   Curriculum/content

The target of the curriculum work process is the production of a high-level curriculum in terms of both content and communication. The curriculum lays the foundation for teaching and the planning (individual study plans) and implementation of studies. The Dean of the college and Heads of degree programs are responsible for the curriculum work (**Appendix MATH04**).

The curriculum work ensures the production of high-quality degrees: the expertise obtained from the degree studies is based on current, key research-based knowledge in the field of science in question, and on the development of general competencies as a part of the degree. The curriculum work takes into account the expertise required in the increasingly diverse and international world of work and the perspective of lifelong learning. Degree programs collaborate in curriculum work in order to secure synergy benefits as extensively as possible. (**Appendix MATH01**)

The objectives of degree programs and courses are defined as learning outcomes. The learning outcomes courses are based on the mission of a given degree program. Descriptions regarding instruction (e.g. learning outcomes and number of ECTS credits) follow regulations and are realistic.

The process results in degree program and course descriptions, which are published annually in the study guide on the university web site. Publication is coordinated by the Student Affairs Office.

The quality of the process is evaluated by examining the curriculum process and degree program development. The quality indicators for the curriculum process are: the continuous development and professional relevance of curricula and degree structures, true-to-life course descriptions that follow guidelines and the publication of the study guide on schedule. Changes to study guide are handled by the faculty councils.

The executive group and the advisory group managed by the Head of the program make curriculum work processes in the program. The professors, study coordinator and students belong to the groups. (**Appendix MATH04**)

Appendices

MU01. The Statute of the council of Higher Education and Universities (University Act)
MU09. Study and enrollment
ZCS02. Teacher's Quality Manual
ZCS03. Quality Guide for Studying and Learning
ZCS05. Project Handbook
ZCS09. Graduates Unit Handbook
MATH01. Program Specification

MATH02. Program Handbook
MATH03. Objectives Matrix Models
MATH04. Study Plan
MATH05. a. Learning outcomes of the degree program/ASIIN's SSC criteria
**   b. Learning outcomes Matrix**
MATH06. Courses Handbook
MPU01. Consistency between University & college Missions
MPU02. Consistency between college & Mathematics Programme Missions
MPU03. Consistency between Mathematics program Missions and Objectives
MPU04. Consistency between Student learning Outcomes and program Objectives
MPU05. Consistency between Program Outcomes and NCAAA Outcomes.

3. Degree Program: Structures, Methods and Implementation

3.1   Structure and modularity

The Degree Program in mathematics standard duration is four years.

The Bachelor's studies start with general studies which include for instance mathematics, Physics, language and communication studies, and computer skills.

All students in the Program in Mathematics have the same major subject; Mathematics. The Bachelor's Project and a seminar (3 CH (KSA SYSTEM) = 5 ECTS) are included in the Major Subject. (**Appendix ZCS05**)

3.1.1 Elective studies and practical training in Mathematics Program

The student must take a suitable amount of elective studies to reach the total of (137KSA CH= 239 ECTS) credits required for the Bachelor's Program. Studies in other domestic or foreign higher education institutions can be included in the Program by application; the studies are approved by the Head of Degree Program. (**Appendices MATH13, MU09**)

Practical training is included in the Mathematics Program. The total value of obligatory practical training is 3 ECTS credits. The student acquires a job for practical training in a company or at the university, and it is completed in summer time. The training will be approved by the reviewer of the training applications. More detailed description on practical training is in the study plan (**Appendix MATH 04**).

3.1.2 Workload and credit points

The basic unit of the studies is a credit. A course is scored by assessment required to pass it. To complete the studies of one academic year requires on average 1600 hours, which corresponds to 36 credit Hour in KSA system (60 ECTS credits points) (**Appendix MATH02**).

One credit point equals to approximately 26 hours' workload, including face-to-face teaching hours, individual studying, as well as preparation for and taking part in the examinations. Obligatory industrial training of 3 ECTS credits is required for the Bachelor's degrees. For training, one ECTS credit equals to three week's working as an employee. The employee contract has to be at least for 18 days in 6 weeks (three days each week) .

The Degree Program is composed so that by following the study guide (Program Handbook), the degrees can be completed within the standard period of study (i.e., it is possible to take 60 credits per year on average), and the maximum of 75 credits is not exceeded in any year (**Appendix MATH 02**).

If a student conducts studies in another university or educational institute in KSA or abroad, he can request the head of the degree program to credit the studies taken elsewhere. **A student can credit and replace study modules also by knowledge gained otherwise. Still, at least 80% credits of the Bachelor's degree (including the Bachelor's Projects) have to be passed at MU.**

3.1.3 Workload and credit points in Bachelor's Degree

The workload for the Bachelor's degree is presented in Table 2(a, b). The detailed workload analysis can be found in (**Appendix MATH08**). The academic year consists two semesters. The elective studies are not included to the workload analysis in Table 2, because the student can choose any courses taught at MU to the elective studies according to his interest. The Bachelor's Project and seminar (5 ECTS) is scheduled to semester 7 or 8 in B.Sc. 4. Language studies are scheduled in the year B.Sc.1 (24 ECTS). Because the practical training (3 ECTS) is usually completed in the summer time, the workload is included to the summary credits of the B.Sc.3.

Table 3-1: Workload per semester Mathematics Program

Level (Semester)	Credit Hours	Contact hours (class hours)/week		Average of independent Study hours/week	Total workload / week	Total workload/semester	ECTS
		Lectures	Tutorials or labs				
1	14	6	8	26	40	600	24
2	15	9	6	27	42	630	26
3	18	14	4	30	48	730	30
4	18	14	4	34	52	780	32
5	18	14	4	32	50	760	31
6	18	13	5	32	50	750	30
7	18	14	4	32	50	750	30
8	18	13	5	32	50	760	31
Grand total	137				382	5750	234

Table 3-2: Workload per year Mathematics Program

	Mathematics Program			
	KSA C.H.	ECTS cr	1st semester	2nd semester
1st Year	29	50	14	15
2nd Year	36	62	18	18
3rd Year	36	61	18	18
4th Year	36	61	18	18
Summary	137	234	68	69
Obligatory studies	122	208		
Elective studies	15	26		
	137	234		

Studies in other domestic or foreign higher education institutions can be included in the degree by application approved by the Head of Degree Program. More detailed description of the credit point system and inclusion of studies in other institutions have been presented in the University Regulations on Education and the Completion of Studies (**Appendix MU03**).

Table 3-3: Percentage of Courses Mathematics Program

Requirement	Type	C. H. KSA.	ECST	Percentage
University	Compulsory	8	14	5.88%
Faculty	Compulsory	29	50	21.01%
	Optional		0	0.00%
Department	Compulsory	82	140	58.82%
	Optional	9	16	6.62%
Free courses		6	11	4.20%
Bachelor's Project		3	5	2.21%
Field training		0	3	1.26%
Total		137	239	100.00%

3.2   Educational methods

The teaching methods applied in the Degree Program in Mathematics include lectures, classroom and laboratory exercises, assignments, project work, and seminars (**Appendix MATH07**). The courses also involve group work which trains the social competences of the students. Computer-based Active board and learning environments are widely used in the courses. The teaching methods are chosen so that the student has time for self-study. As an average the student has 2 hours of independent study per one contact teaching hour. If the final Project, which is mostly self- study, is not included, the coefficient is 2.5. The calculation of the self-study and contact hours for each course is presented in (**Appendix MATH 08**).

In the Degree Program, practice-oriented, problem-based learning are applied in some courses.

To support the educational activities, the College of Sciences publishes the Teacher's Quality Manual (**Appendices ZCS02, ZCS08**) that provides the teaching staff with guidance, for instance, on the following issues:

- *Teaching planning*
- *Defining learning outcomes of a study course*
- *Determining the content of a study course*
- *Deciding the appropriate methods to evaluate the achievement of the learning outcomes*
- *Selecting suitable methods of teaching*

The Teacher's Quality Manual is designed to improve the quality of higher education and is available to all teaching staff at the College of Sciences.

The student has a possibility to impact the content of his studies by choosing the subject of

an assignment and the final thesis according to his interests. The topic of the Bachelor's thesis the student can acquire himself from companies or write from the topic given by the professor of choice.

3.3   Support and advice

Zulfi, college of Sciences offers academic guidance actions that together cover the entire span of studies and efficiently support studies and learning. With this guidance, students are able to complete their studies by following an appropriate study plan that they have prepared themselves and to graduate within the desired time. (**Appendix ZCS10**). The roles and duties of study guidance personnel and units are listed in the following Table.

Table 3-4: Academic Guidance Methods

Peer tutor	Introduces new students to the university, studies and the student community, and helps them with practical arrangements at the start of studies. A peer tutor introduces new students to the university facilities, study guidance staff and other students. A peer tutor makes sure that students know the most important practices related to studies: registration for courses, attending lectures, taking examinations, preparing a course schedule, social aspects.
Tutoring coordinator	Coordinates and develops the university's peer tutoring together with faculties, Student Services and the student union.
Student adviser	Student advisers are ZCS students who work part-time while they study. They provide information and guidance in studies, see to the choice of tutors and arrange their training together with the study coordinator and take part in arranging briefings for students.
Study counseling psychologist	Counsels students in problems related to studies and learning and provides expertise in issues involving learning and guidance, supporting other study guidance personnel.
Study coordinator	Coordinates study guidance for students. The duties include study and degree guidance for students, from applicants to postgraduate and partly even mature students. The study coordinator helps students in preparing their individual study plan (including the recognition of prior learning and studies outside MU, e.g. through the flexible right to study) and provides guidance in administrative issues related to graduation.
Head of degree program	Is in charge of evaluating and developing study guidance. Grants acceptance of courses not offered by the university.
Head of study affairs	Is responsible for organizing study guidance in the faculty. Is responsible for administration of studies and partly also for study guidance related to administrative affairs.
Teacher/tutor	Helps students prepare their individual study plan and follow its progress. Teacher/tutors provide guidance in the selection of major and minor subjects from the viewpoint of career guidance. They are study guidance personnel appointed for a department or degree program. Students may turn to them with any issues involving studies.
Teachers	Are responsible for study guidance related to the completion of the courses/modules they are responsible for.

Introductory course/module	Introductory courses are arranged in all degree programs to help students get started with their academic studies. Introductory courses usually also guide in preparing an individual study plan.
Professors	Provide guidance in the selection of a research topic, and in preparing final theses for undergraduate and postgraduate studies.
International Services	Offers general study guidance to international students at the university and coordinates the activity of international tutors. International Services also assists Finnish students in matters related to studies abroad.
Career Services	Guides students in career planning and searching for employment.
Language Centre	Offers study guidance related to language, communication and culture studies.
Library	Provides guidance in information retrieval and instruction in information literacy.
Origin helpdesk	Supports services for the use of information and communication technology in studies.

At the beginning of their studies, students prepare an individual study plan on the Introductory Course. The study plan is made for the entire duration of the studies, i.e. until the B.Sc. degree is completed. An independent study plan is a tool that helps the students plan their studies. Its purpose is to help students to see their studies as a whole from the very beginning, and to support students in choosing courses that best suit them. The aim is also to avoid delaying graduation unnecessarily. It also awakens students to realize their own responsibility for their studies, and motivates and incites them to make a commitment to their studies. Example of study plan for B.Sc. is enclosed in (**Appendices MATH13**)**.** Based on the individual study plan drawn by the student, in the B.Sc. degree program in Mathematics, the student and the teacher adviser will have a discussion on the plan.

Teacher advisers are experts of the various fields in Mathematics who provide the students with content related tutoring regarding the individual study plan.

Teachers are responsible for the courses they teach, as well as supervision concerning contents of their own subjects. Persons in charge of the courses are required to have a doctorate. Teachers are available at the university mainly during office hours, but students may have guidance and individual supervision also out of these hours by fixing the time with the teacher.

Appendices:
 MU03. Implementation Rules of Undergraduate Study and Examinations
 MU09. Study and enrollment
 ZCS02. Teacher's Quality Manual
 ZCS05. Project Handbook
 ZCS08. Staff Handbook
 ZCS10. Academic Advising
 MATH01. Program Specification

4. Examinations: System, Concept and Organization

4.1 What is assessment?

Assessment is systematic process of documenting and analyzing the effectiveness of the teaching and learning process, administrative and support services, and research and community engagement activities, to ensure that the expectations and standards are met in fulfilling the mission of College of Science.

4.2 Process and Steps in Assessment:

The assessment process has the following steps (**Appendix MATH10**):

a. Formulating a statement of outcomes and objectives as derived from Program and College of Science mission
b. Establishing the tools and methods of measurement of extent of achievement
c. Determining the criteria for successful achievement as KPI's
d. Observe, document and analyze the results against the predefined KPI's
e. If the criteria are met/objectives achieved, the results are documented
f. If the criteria are not met/objectives not achieved, results are referred to the appropriate entity (committee, department or administrator) for action plan development and implementation
g. The action plan for improvement and action taken is provided to the assessment committee for future assessment
h. All action taken and results are documented to stakeholders through an annual report (**Appendix MATH12**).
i. All the data regarding a particular area (program, administration, research, community engagement etc.) are gathered and reported to the appropriate committee (Curriculum Development Committee, Committee or Strategic Planning) (**Appendix ZCS01**).
j. In the case of successful achievement of objectives and goals in a particular area, forward planning with revised specified objectives/goals/ to achieve a revised mission in the next strategic plan is undertaken.
k. Revising specific goal/objective based on the information learned during the assessment cycle, consistent with relevant change in the strategic plan and other areas of need, as determined by the assessment results or stakeholders input.

4.3   Assessment Plan of College of Science

Excellence in Mathematics education and research, with community engagement and appropriate quality and administrative measures are College of Science goals derived from College of Science mission, which is in line with that of Majmaah University. To fulfill this mission, College of Science offers a quality B.SC in Mathematics program, while all other mission related areas support the program and contribute towards achievement of institutional goals and mission of Majmaah University.

The Assessment Committee of College of Science in collaboration with the Study Plan Committee has developed its assessment plan for self-assessment of and accountability for all the actions and procedures leading toward achievement of the College of Science mission through achievement of the B.Sc. in Mathematics Program outcomes and College of Science strategic plan goals and objectives, pertaining to mission related areas, to determine the extent of achievement and to provide input to the concerned sections for progress to comply with the Quality Standards of National (NCAAA) Accrediting agencies.

4.4   Components of College of Science Assessment Plan

4.4.1 Program Assessment Plan:

i. Assessment of extent of achievement of terminal program objectives

Current forms of Assessment are based upon the analysis of data of students' achievements/ performance in various Mathematics courses, the objectives of all of which have been mapped with those of the program. Assessment of achievement of outcomes for various domains of learning, as summarized by NCAAA have also been planned and incorporated.

ii. Assessment of Program Effectiveness

In addition to the assessment of achievement of terminal program outcomes, following strategies are included to strengthen the data to determine the effectiveness of the program:
a. Job placement data
b. Data regarding the number of College of Science graduates securing scholarship for graduate studies
c. Quantitative and qualitative data program and its outcome (graduates) from :
   1. External preceptors,
   2. Graduating students,
   3. Alumni (**Appendix ZCS03**)
   4. Stakeholders and Employers

d. Benchmarking the students/graduates' achievements with those of peer national programs

4.4.2 Plan for Assessment of achievement of College of Science

This component of the plan aims to assess the achievement of all the College of Science strategic plan objectives in the mission related areas, as well as in relation to quality standards:

i. Student support, and development
ii. College of Science Administration
iii. Resources and facilities for successful program administration
iv. Staff recruitment, development and retention
v. Community engagement
vi. Research

4.4.3 Types of Assessment

i. Direct Assessment:

Assessments that involve examination of student work or performance, there are various types of evaluation methods (see table 4.1) are widely used. Courses are not often evaluated by the final examination only. Assignment, laboratory work, homework, seminar etc. may contribute to the final grade of a course (**Appendix MATH 09**). The final examination also can be substituted for written intermediary tests in some courses. Examinations are typically written including essays, problem-solving or case-based questions and calculation problems. The evaluation method used in the course is described in the Program Handbook. (**Appendices MATH02, MATH15a**)

Table 4-1: Schedule of Assessment Tasks for Students during the Semester

Assessment Method	Number/Type				Instructor Assessed	TA/Grader Assessed	Peer/Self Assessed
Homework							
Mid Terms/Final Exams							
Quizzes							
Individual Projects	1-2 wks	3-4 wks	1/2 sem	Full sem			
Team Projects	1-2 wks	3-4 wks	1/2 sem	Full sem			
Lab Assignments							
Computer Assignments							
Computer Tools Used							
Oral Presentations							

Written Reports				
Other	Design project (project binder)			

Examinations are arranged according to the curriculum. Examinations outside the schedule can also be arranged.

Table 4-2: Courses are usually evaluated on the scale :

Grade Points	Grade Meaning	Latter Grade	Percentage Grade	Grade Points	Grade Meaning	Latter Grade	Percentage Grade
5.00	Excellent+	A +	95-100	2.00	Pass	D	60-64
4.75	Excellent	A	90-94	1.00	Failure	E	< 60
4.50	Very good+	B +	85-89	1.00	Debarred	H	0.00
4.00	Very good	B	80-84	0.00	Withdrawal	W	0.00
3.50	Good+	C +	75-79	0.00	Incomplete	I	0.00
3.00	Good	C	70-74	0.00	Transferred	TR	0.00
2.50	Pass+	D +	65-69				

The maximum score for each course is 100 points, and 60 points is required to pass the course. (**Appendix ZCS04**)

Grades obtained in courses are listed in the university website data system, and transferred to the student website, that students use to enroll to courses and examinations. Students can view their grades and the weighted average of their studies at any time. Grades are included in the degree, and their weighted average, are listed in the report that complements the diploma.

A final project thesis is required to complete the Bachelor's degree program. The project thesis is independent work of student, and its topic and content are discussed with supervisor before starting the work. The peer committee is required to assess the project thesis. The examiners and supervisor of project thesis must have the degree of PHD at least (**Appendix MU01**). The project thesis course is graded on the scale of 0-100. The Bachelor Seminar of Mathematics includes a written project thesis, seminar presentation

at a colloquium consisting of other Bachelor-level students and teaching. Supervisor and examiners collaborates with each other in evaluation process. The project thesis grades are divided equally between the supervisor and peer committee. The directive assessment matrix (**Appendix ZCS05**) is presented for the students in the first lecture.

ii. Indirect Assessment: Assessments:

Those supplement and enrich what faculty learns from direct assessment studies (**Appendix MATH15 b**, **MATH10)**

4.5   Program Assessment

4.5.1 Concept:

Program assessment is an on-going process designed to monitor and improve student learning. Faculty members, led by the Curriculum Development and Assessment Committee:

1.1 Develop explicit statements of what students should learn.

1.2 Verify that the program is designed to foster this learning.
1.3 Collect data that indicate student attainment.
1.4 Use these data to improve student learning

1.4.1   Objectives of Program Assessment

a. To Improve
   i. Study plan, courses, and course objectives

   ii. Instructional strategies, methodology and practice

   iii. Student services
b. Accountability (also measuring effectiveness of program)
   i. Benchmark with peer program outcomes/student achievements

   ii. Feedback from stakeholders regarding academic product and its utility

   iii. Graduates pursuing further studies, compete for national and international scholarships

   iv. Justification for resources being used by COLLEGE OF SCIENCE
c. To secure Accreditation
   i. Program Accreditation by NCAAA: which will certify that the resources and facilities provided, processes of teaching and support services, and the quality and extent of students learning in terms of knowledge, skills and abilities needed for Mathematics practice meet required standards for the qualifications that is offered.

1.4.2   Program Assessment Plan describes

a.   How will each objective be assessed?
b.   Who will collect and analyze the data?

    c. Where will it be done?
    d. How will data be collected?
    e. When and how often will it be done?
    f. Who will reflect on the results? When?
    g. How will results and implications are documented

1.5   Program Development process at College of Science:

1. Development and revisiting the program mission and the curriculum, according to Vision and Mission of the University and the College of Science (**Appendices, MPU 01- MPU 03**).

2. Mapping the course objectives with terminal program outcomes.

    a) Mapping of course objectives with:
        1) Teaching and Assessment Methodologies.
        2) Terminal Objectives. Blueprinting of courses.
    b) Mapping of Course ILO's with teaching and assessment methodologies at the start of each semester.

4.6.3 Benchmarking of study plan similar to national and international programs:

National (College of Science, King Saud University) and International (United Arab of Emirates University and University of California, Santa Barbra, USA) (**Appendix Math17**)

Appendices

MU01. The Statute of the council of Higher Education and Universities (University Act)
MU09. Study and enrollment
ZCS01. Zulfi, College of Sciences Strategy Plan 2013
ZCS04. The calculation of the Final Grade (GPA)
ZCS05. Project Handbook
ZCS12. Assessment & Measurement Guide
MATH01. Program Specification
MATH02. Program Handbook
MATH09. Course evaluation methods
MATH10. Course Feedback (example)
MATH15. a. Direct PLO Assessment & b. Indirect PLO Assessment
MPU01. **Consistency between University & college Missions**
MPU02. **Consistency between college & Mathematics Programme Missions**
MPU03. **Consistency between Mathematics program Missions and Objectives**

2 Resources

2.2   Staff involved

Within College of Science in Zulfi, there are about 51 faculty members working full time. The Department of Mathematics employs about 32 persons. The composition of teaching and research personnel in mathematics department based on a five-step category: demonstrator, Lecturer Assistant Professor, Associate Professor and Professor in Table 4. The employment contracts of the personnel 1 year contracts positions for all. The number of total academic staff accounts 30 including also the researches with no teaching responsibility. The CV of each staff member participating in teaching is enclosed in the staff C.V.'s (**Appendix MATH16**).

Table 2-1: Staff Contributing to the Degree Program (2014)

Position type	Mathematics	Physics	Computer Science
Professors[1]	3	2	0
Associate Professor[1]	2	3	2
Assistant Professor[1]	11	9	9
Lecturer[1]	5	3	5
Administrator	9	3	12
Total academic staff	**30**	**20**	**28**
Full time	**21**	**14**	**16**
Scholarship	**9**	**3**	**9**

[1]Personnel with teaching responsibility

2.3   Staff development

College of Science aims to create a good working environment for its staff, and to support their professional development and well-being at work.

The Majmaah University has a Deanship of Quality and Skills Developed through which the university personnel have representation in decision-making concerning the development of the working environment and conditions. The Deanship also annually revises the measures for professional development and maintaining professional expertise that determine the focus areas of personnel training at the university. The chair of the Deanship is the Vice Rector in charge of Quality and Skills Development. The names of other members and the Committee memoranda are available on the University cite http://www.mu.sa/en.

The University organizes training in workshops which aims to strengthen the practical teaching competences of the teaching personnel. The extent of the course package is 25 Credit Hours credits total on the university cite http://www.mu.edu.sa/en/deanships/deanship-quality-and-skills-development. In addition, the University organizes staff training in utilization of computer programs, Quality assurance programs and e-learning programs. The professors are also obliged to participate in management training organized by the University or the college.

University staff members conduct annual performance and development discussions with their Chairman. The parties of the discussion examine results obtained, set goals for the near future also concerning the professional development and personnel training needed. Instructions for performance and development discussions are available on the University web site.

2.4 Institutional environment, financial and physical resources

2.4.1 Institutional environment

a. Description of the institution

The establishment of Majmaah University, which is deemed as a newly established one, came as a result of the decree of the Custodian of the Two Holy Mosques King Abdullah Bin Abdul Aziz Al-Saud and the Prime Minister and Chairman of Higher Education on Ramadan 3rd, 1430 - 24th of August, 2009 to establish Majmaah University. Majmaah University is established to serve a wide area including Majmaah, Zulfi, Ramah, Ghat and Hawtat Sudair. It will also help in achieving the Ministry of Higher Education's objective in expanding the university education across the country.

The establishment of College of Science in Zulfi, came as a result of the decree of the council of Higher Education on Shaaban 5th, 1426 - 24th of August, 2005(**Appendix MU02**).

The College of Science applies the Regulations on Education and the Completion of Studies (**Appendix MU03**) approved by the Rector. The Regulations define the basic ways of action concerning the teaching and studying at the college and the degree programs provided by the University. The Regulations are published on the University's web pages.

The University council decides the strategic long-term goals of the university teaching and education, and the degree programs provided by the University. The council also decides the number of new entrants accepted to the University's degree programs.

The University has a Vice Rector responsible for education affairs. In addition, The University consists of 13 college which the education and administration controlled by the Dean of the college. Each degree program has an appointed head. The Dean organizes a meeting between the heads of the degree programs once in every month to discuss the leading, evaluating and developing principles of the degree programs. The meeting decisions of the meetings are published on the University web sites which are available for the committee members. The Vice Rector also leads the University's supervisory and development Committee for teaching appointed by the Rector. The objective of the Committee is to promote the internal cooperation within the University in developing the teaching customs.

The student representation in the University's administrative bodies is determined by the Universities Act and the Administrative regulations of the University. In accordance with the statutory representation in the administrative bodies, the students also have a

representation in the University's supervisory and development group for teaching.

b. Committees responsible for teaching in the Mathematics program

The Department of Mathematics is a part of the College of Science in Zulfi Governorate in Majmaah University. The head of the college is the Dean, and the highest decision-making body in the college is the faculty council. The Dean acts as the chair of the faculty council. The dean manages the college and is responsible for the results of its instruction, research and societal influence. The College council makes decisions regarding the curricula. A study guide presents the aims and organization of the education, and the course descriptions and learning outcomes of courses in the degree. (**Appendices, ZCS03, MATH05, MATH06**)

The College of Science has a Quality assurance unit for teaching appointed by the Dean of the College. The unit is responsible for developing the quality of teaching and the contents of the degree programs within the College. The unit has representation from each degree program provided by the College. The unit also has three student representatives that are appointed on the basis of the recommendations of the Students' Guidance Unit. (**Appendix ZCS10**)

The College Council is responsible for supervising the quality of teaching. The Council also decides the study plans and the degree requirements. In addition, the Council makes the proposal to the Rector concerning the entry requirements and the number of new entrants accepted to the degree programs.

The College is responsible for the equipment's and resources needed in teaching and research. The Dean of the College is responsible for the resources needed in teaching. The Dean also appoints the heads of the Faculty's degree programs.

The heads of the Faculty's degree programs are responsible for Managing, evaluating and developing the degree programs. The heads of the degree programs accept the topics of the Bachelor of Science students. Each degree program of the College also has an advisory group to support the work of the head of the program.

Teachers in charge of the study courses are responsible for executing, evaluating and developing their own teaching. The College has published Teacher's Quality Manual to support the teaching activity. (**Appendix ZCS02**)

2.4.2 Physical Resources

The College of Science has 25 classrooms prepared with technology smart plat form and 200 computers in 9 Labs and work premises for group work. The library provides services for students and staff, and for outside customers. In the College premises, there is a restaurant and a cafe available for students, staff and other people. Four rooms have been reserved for students' Activities; there is also a student health center.

Computer facilities

University offers personnel Windows laptops for all staff. Printers and scanners are available. The computers for personnel are equipped with special programs used in research and teaching purposes.

Students can use the computers that are in common use in the library area, or in the computer laboratories. The University's Information Services and Technology (IT) Unit is responsible for the computers, software and data systems.

Centralized services, such as the learning environments can be accessed also outside of the campus. The university offers WLAN services to enable the use of students' own computers at the campus. Students enroll on the courses and see their credit points through http://edugate.mu.edu.sa/mu/init Web data system. They get the course information, learning material and assignments of the courses through Portal Websites staff members.

There is also a computer lab (High Quality services) to have E-learning training for staff.

Library

Majmaah University gates the libraries affairs deanship which offers its services to searchers of staff members, students and individuals. It's no doubt that information at that time became the pillar in progress of any country. Accordingly, deanship of libraries affairs in Al Majmaah University started to develop its libraries. University libraries provide information sources and storages in all its types and shapes. It also provides the academic curricula and services for beneficiaries within a proper learning atmosphere. In addition to that, the libraries affairs deanship sought after providing a number of the electronic and database sources for its libraries visitors so to support the academic process. Also, the one who schemed the deanship, which will be soon applied inshaAllah, has to train students and researchers on using such electronic sources.

Central Library includes the Central Library between its shores material equipment and software appropriate to serve the attendees the library, where there is the library furniture modern shelves of books and desks for reading and retreats Internet and retreats to read, and made available indexes through the Koha library management and provides gateways protection for books from unauthorized use.

Sections of the Central Library:
1. Library Management

2. Services beneficiaries
3. The electronic catalog
4. Hall of free viewing and reading
5. Periodicals
6. References and foreign books

Saudi Digital Library (SDL) is the largest academic gathering of information sources in the Arab world, with more than (310،000) scientific reference, covering all academic disciplines, and the continuous updating of the content in this; thus achieving huge accumulation cognitive in the long run. Library has contracted with more than 300 global publishers. The library won the award for the Arab Federation for Libraries and Information 'know' for outstanding projects in the Arab world in 2010.

It also provides a digital environment for various Saudi universities, and research organizations in common with it, and in this environment of the benefits and advantages cannot hand one to play, or to reach him, and these advantages:

- One central management, manages this huge content, and constantly updated.
- Common share for the benefit of, any University would benefit other universities that are now available to the other, in any scientific field.
- Enhance the status of universities when evaluating, for Academic Accreditation, and through sources rich, modern, and publish the best Global Publishers.
- Bridging the gap between Saudi universities, where emerging universities can get

the same service you get major Saudi universities.

College Science Library

Library lies in the College of Science of Az Zulfi in the ground floor on a space approximate 70 square meters.

Library Departments:

- Library Administration
- Beneficiary Services
- Electronic Index

Library's Possessions:

Library possess a range of various information sources estimated with a number of 280 titles and 845 copies and volumes in all physical sciences.

Library Systems:

Management of the library and its indexes will be through its coding system which is considered to be among the modern systems used in the library management.

Library Services:

- Internal reading service
- Automatic Search in the library indexes.
- Reference Services
- Photography
- Continuous Updating
- Internet Service

The database includes information about both printed and electronic books as well as the storage information of printed journals. Electronic books can be accessed via a link to the Library catalogue. The Library provides its customers with library and information services both on-site and online. Information literacy education for the entire University is also arranged and given by the Library personnel. The Library is open to faculty staff, students, and general public during terms on workdays: Sun-Thu 8:00–18:00. In summer and during the holiday season the Library closes at 15:30 on each workday. There are 10 computer workstations available for the customers.

Appendices:

MU02. Government Decree on Majmaah University & college of Sciences

MU03. Implementation Rules of Undergraduate Study and Examinations

ZCS01. Zulfi, College of Sciences Strategy Plan 2013

ZCS02. Teacher's Quality Manual

ZCS03. Quality Guide for Studying and Learning

ZCS10. Academic Advising

MATH05. Learning outcomes of the degree program/ASIIN's SSC criteria

MATH06. Courses Handbook

MATH16. Staff C. V.

3   Quality Management and Further Development of Mathematics Program

The key aim in the quality management and development is to incorporate quality management (**Appendix ZCS11**) into the normal activity of the university, with the underlying idea of continuous improvement. The quality targets have been derived from the university strategy. The university's quality management system covers the entire range of education provided by the university (undergraduate education), research, societal and regional interaction, and support services.

Quality Management unit (QMU) (**Appendix ZCS 11**) established and developed by the Department of Mathematics in the continuously University's mission improvement of its programs and the academic.

To manage and develop quality assurance, the unit will accomplish the following:
1. Evaluation of the documents and evidence of quality assurance and development.
2. A proposal of unfinished requirements plan.
3. Submit a report to assess of the standard requirements.

Comment and General Description of Quality Assurance
- A high quality institution should regard itself as a learning organization, one that systematically studies the quality of its own activities on a continuing basis and uses what it learns from that study to improve its operations.

- The central focus in these assessments should be the quality and extent of students' learning considered as outcomes; what students understand and can do as a result of their studies whether that learning is appropriate to their field, and how well has it been learned. Other important outcomes are research (for institutions with that responsibility) and broader contributions to the community.

- A wide range of other activities that provide supporting infrastructure must also be evaluated and progressively improved, and the relative emphasis on these will vary over time in response to the institution's mission, the circumstances in which it finds itself, and its strategic priorities for development.

- A senior member of College should be given responsibility for leading the quality assurance processes, and a unit drawn from all parts of the organization should be appointed to provide advice and assistance, and oversee what is done. An office should be established within the central administration to coordinate and lead quality assurance activities. Self-assessment and planning for improvement should occur regularly in all parts of the institution, with benchmarks for comparisons of performance selected for the various programs and administrative units. The objectives for each administrative unit should be demanding, but appropriate and achievable.

- Quality improvement should be integrated into the institution's normal planning processes in a continuing cycle of planning, implementation, evaluation and

review. The system should involve continuous monitoring of evidence about performance and independent advice on interpretations of that evidence, with adjustments made in activities to ensure that quality of performance meets the benchmarks that have been established. Internal reporting of performance and adjustments in strategies should take place at regular times, normally at least once each year, with more extensive reviews of programs and broader institutional activities at least once every seven years.

- While rigorous standards should be applied, the institution should have an atmosphere of encouragement and support in which weaknesses are openly acknowledged and assistance provided to overcome them.

The QMU Tasks:

i. 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.
5. Check the practice field which related 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 institute to finish the requirements.
10. Preparation of the reports.
11. Follow-up the implementation of the recommendations of unfinished requirements and collect the evidence.

ii. 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. College members.
7. Quality faculties units.
8. Students.
9. Community

The nature of the data and information

The committee gathers information and documents for assessing response to quality management standard.

Methods and tools to collect data and information: This will be done through

1. Interviews
2. Questionnaires
3. Collection of reports

3.2   Quality assurance and further development

The university's quality management system is described in the quality handbook and the regulations of organizational units (e.g. support services). These quality regulations include also process descriptions and procedures for key processes. The quality management documents and other related material are available on the web site. (**Appendix ZCS11**)

The main quality handbook depicts the university's quality policies and goals, key resources, the university's management practices, the university's key processes and their quality management, and practices related to the assessment, measurement and development of activities. The main quality handbook lays a foundation for describing the entire quality management system of the university and gives both internal and external stakeholders a comprehensive picture of the quality management of the university's different activities.

The ZCS has set quality targets, which have been derived from the ZCS strategy. (**Appendix ZCS01**)

The following quality targets apply to academic education.

- *Students at the ZCS will obtain high-level academic know-how, including specialist skills of his field and transferable skills needed to utilize the specialist skills.*

- *The university's students and employers of MU graduates are satisfied with the contents and implementation of the studies. The teaching staff is satisfied with the conditions provided by the University for teaching.*

- *The possibilities for lifelong learning are diverse and flexible; and education is produced according to the needs of the target groups.*

The ZCS has also published ZCS Teacher's Quality handbook in order to guide teachers to good teaching, as well as Quality Guide for Studying and Learning in ZCS to strengthen the students' role in the quality of education. .(**Appendices ZCS02, ZCS03**)

The dean is in charge of education at the ZCS. He manages the educational affairs and development of education of the ZCS in cooperation with the heads of degree programs and steering and development committee for teaching.

The Dean and the heads of degree programs have regular meetings, where they evaluate and discuss about procedures concerning education and needs for development. The steering and development committee for teaching, in an advisory capacity, aids the Dean in decision making. The committee, headed by the coordinates and promotes the development of ZCS education, and prepares the application procedure for the quality bonus

for teaching and prepares the allocation decision for rector.

Quality Assurance at Mathematics Program

In Mathematics program, there is an advisory steering unit for the degree program. It supports the head of the degree program in producing, assessing and developing the degree program. The advisory steering committee of the Degree Program Mathematics meets regularly and handles issues related to the degree program's teaching, research, and economy, as well as the development of the program.

Further development of the program

The key areas in terms of developing the quality of education at college of science are the following:

- development projects for teaching, research
- quality for education,
- support services for teaching, and research

College of science is actively involved to use several education tools for teaching. The dean decides on development projects which college of science engages in and starts to promote.

The university grants quality bonuses for the development of education for a year at a time. The quality bonus is a reward for development measures taken and an incentive for the further development of education and teaching. The steering and Excellence unit for education makes the preparations for the application procedure and the decision to grant a quality bonus, and the dean appoints the recipients of the bonus (**Appendix ZCS06**).

The university annually offers its teaching staff study modules in quality and E-Learning. The teaching staff is also offered other training that supports their teaching and its development.

The employment of the teaching staff is based on scientific qualifications and their development, the development of teaching skills and the variety of teaching duties, and responsibility for one's field of science and its development.

The support services for education allow teachers to focus on actual teaching and study guidance. The support services provide administrative services related to instruction, as well as technological support e.g. in setting up web-based instruction. The responsibility for these support services is shared by Student Services and Information Services and Technology, which operate within the context of University Services, and by college support services. **D**esire**2L**earn (D2L), a web-based learning environment, is in use on nearly all courses of Mathematics. Information Services and Technology will be responsible for the implementation of the new learning environment and training of the personnel. (http://el.mu.edu.sa/).

The recognition of teaching qualifications and the adoption of teaching portfolios in the appointment of teaching personnel support the development of teaching. For teaching

positions, the university recruits professionals with not only strong scientific expertise in the field in question, but with teaching skills, as well. To this end, applicants for teaching positions must also submit a teaching portfolio or another report on their teaching qualifications. Instructions for compiling a teaching portfolio are available on the intranet. In addition, the appointment of professors requires a trial lecture from the applicant. The faculty in question supplies the applicant with instructions regarding the trial lecture. Instructions are also available from the university registrar's office. (**Appendix MATH16**)

3.3   Instruments, methods and data

During studies, students are asked to fill in several questionnaires with which they can give feedback and tell opinions concerning the studies and conditions in the university. At the beginning of the studies, freshmen are asked to fill in a questionnaire concerning the progress of studies and tutoring of freshmen. A feedback questionnaire to students and peer tutors helps to evaluate

Whether the start of studies and initial study guidance have been successful. The feedback survey is carried out annually by the Quality unit. The feedback is discussed with the peer tutors and personnel in charge of study guidance. The feedback combined with practical experiences will be used to develop study guidance for new students and tutor training (**Appendix MATH10**).

The MATH department students compile feedback from each course twice a year. The feedback is published on the educate web pages. The feedback is discussed with professors and course teachers and improvement suggestions are reviewed.

The quality committee also compiles student feedback regularly every other year. This questionnaire mainly concentrates on the well- being of the students, and it often points out some needs for development in teaching. The results of the questionnaire are communicated to the university personnel.

Monitoring of credits

A study plan is an important tool to evaluate the progress of studies of an individual student. All Mathematics Department students prepare a study plan at the beginning of their studies. All individual study plans are evaluated by the study coordinator. Plans which are non-standard are confirmed by the head of the degree program. The degree programs are designed and composed so that the completion of degrees is guaranteed within the standard periods of study 4 years. Examples of student study plans for B.Sc. (**Diploma supplement**) (**Appendix MATH13**)

The Average and cumulative GPA are calculated every semester for the student automatically by the system. To know how to calculate the averages, you should follow the following steps: Calculating the Semester Average (**Appendix ZCS04**)

The GPA is calculated considering the following points:
1. Knowing the number of hours of the courses.
2. Knowing the mark obtained in each course.
3. Knowing the corresponding grade of each mark.
4. Knowing the value of each grade.
5. Knowing the points = number of hours of the course × value of the grade.
6. Determining the total points obtained in all courses of the semester.
7. Determining the total number of hours registered in the semester.
8. The average is calculated every semester according to the following equation :

The percentage of marks, grade and value obtained by the student in each course, which is used to calculate the points:

Table 3-1: The percentage of marks, grade and value obtained by the student

Mark	Grades	Letter	Values
95 – 100	Excellent +	A+	5
90 to < 95	Excellent	A	4.75
85 to < 90	Very good+	B+	4.5
80 to < 85	Very good	B	4
75 to < 80	Good +	C+	3.5
70 to < 75	Good	C	3
65 to < 70	Pass+	D+	2.5
60 to < 65	Pass	D	2
< 60	Failure	E	1
Absent	debarred	H	1

Calculating the Average Cumulative:
The GPA semester average is calculated as follows:
Table 3-2: Calculating the grade of the first semester shows the grand total of points (for all semesters that has been studied) .The cumulative average is calculated according to the following equation:

$$GPA = \frac{Grand\ Total\ of\ Point}{Grand\ Total\ of\ Credit\ hours}$$

Here is an example of how to calculate the grades above:

Table 3-2: Calculating the grade of the first semester

Course	Credits	Mark	Grade	Grade value	Point
Math101	4	67	D+	2.5	4x2.5=10

Chem 101	4	73	C	3	4x3=12
Eng 121	3	77	C+	3.5	3x3.5=10.5
Arab 101	2	81	B	4	2x4=8
Total	13				40.5

$$GPA = \frac{Grand\ Total\ of\ Point}{Grand\ Total\ of\ Credit\ hours} = \frac{40.5}{13} = 3.12$$

Table 3-3: Calculating the grade of the second semester

Course	Credits	Mark	Grade	Value Grade	Points
Math 101	3	61	D	2	$3 \times 2 = 6$
Stat 101	3	73	C	3	$3 \times 3 = 9$
C.S. 206	3	80	B	4	$3 \times 4 = 12$
Arab 103	3	88	B+	4.5	$3 \times 4.5 = 13.5$
Islam 101	2	92	A	4.75	$2 \times 4.75 = 9.5$
Eng 122	3	97	A+	5	$3 \times 5 = 15$
	17				65

$$GPA = \frac{Grand\ Total\ of\ Point}{Grand\ Total\ of\ Credit\ hours} = \frac{65}{17} = 3.82$$

To calculate the average cumulative:

$$GPA = \frac{Total\ of\ Point}{Total\ hours\ of\ semesters} = \frac{105.5}{30} = 3.52$$

Courses Development

Student feedback for courses is collected for courses in accordance with a college-wide procedure. Teachers together with the Quality unit are responsible for collecting student feedback. The electronic feedback questionnaire applies the same assessment criteria to the courses. The survey includes the expediency of the course and a general impression of the course (**Appendices MATH10, MATH15**).

The following questions deal with the fulfillment of these criteria:
1. The applied working methods were appropriate for the purposes of the course and they supported my learning during the course. Answers on a scale of 1-5 (5 = strongly agree, 1 = strongly disagree).
2. Overall evaluation of the course (scale of 1-5).

3. Open feedback on the course.

The results of the students' feedback (the average of the questions 1 and 2 for study year) are presented in Table 6-4: Course feedback. An example of the course feedback is included in Diploma supplement (**Appendices MATH10, MATH15**)

Table 6-4: Course feedback

	MATH 321	MATH 351	MATH 352	MATH 353	MATH 322	MATH 342	MATH 381	MATH 423	MATH 443
Question 1	3.6	2.5	4.4	3.2	4.2	3.8	3.5	3.9	4.4
Question 2	3.5	2.5	4.4	3.7	4.2	3.8	3.4	3.9	4.4
Question 3	2.9	2.6	4.3	3.7	4.2	3.8	3.1	3.9	4.3
Question 4	2.8	2.4	4.1	3.8	4.2	4.2	2.8	3.9	4.1
Question 5	3.5	3.2	4.4	3.7	4.3	3.8	3.1	3.7	4.4
Question 6	3.8	-0.5	4.1	4.2	4.2	3.8	2.9	3.9	4.1
Question 7	3.6	3.6	4.5	3.5	4.3	4.2	3.5	4.3	4.5
Question 8	3.4	2.9	4.5	4	4	3.8	3.2	4.1	4.5
Question 9	3.4	2.6	4.3	3.7	4.2	4.2	3.1	4.1	4.3
Question 10	3.4	2.7	3.9	3.5	4	4.2	2.9	3.5	3.9
Question 11	3.2	2.8	4.1	3.8	4	4.2	3.2	3.9	4.1
Question 12	3.5	2.9	3.9	3.7	4.2	3.8	3.5	3.1	3.9
Question 13	2.9	2.4	4.3	3.7	4.2	3.8	3.1	3.9	4.3
Question 14	2.6	2.3	4.3	3.5	4	4.2	2.9	4.1	4.3
Question 15	2.9	3.5	3.9	3.5	4	4.2	3.4	4.1	3.9

	MATH 321	MATH 351	MATH 352	MATH 353	MATH 322	MATH 342	MATH 381	MATH 423	MATH 443
Question 16	3.1	3.3	4.5	4.2	4	4.2	3.4	3.7	4.5
Question 17	3.1	3.9	4.4	4	4.3	3.8	3.5	4.1	4.4
Question 18	2.9	2.4	4.4	3.7	4	3.8	3.2	3.9	4.4
Question 19	3.1	2.4	4.4	3.7	4.2	3.8	3.1	4.3	4.4
Question 20	3.6	3.3	4.5	3.5	4.2	5.2	3.9	4.3	4.5
Question 21	3.2	3.1	4	4.2	4.2	5.2	3.8	3.7	4
Question 22	3.1	2.7	4.4	4.2	4.2	4.2	3.6	3.7	4.4
Question 23	2.9	3.1	4.1	4.2	4.2	4.2	3.4	3.9	4.1

The feedback system also allows teachers to add questions to the questionnaire, thus collecting feedback for their own purposes. This, combined with the open feedback field in all of the questionnaires, supports the teachers' own professional development. Students are motivated to give feedback by preparing course-specific questions in addition to the general ones.

The feedback for each course is recapitulated by the Quality unit every semester with a general reporting form. The reports are forwarded to the head of degree program and to the quality manager, who then submits the reports to the dean before the performance and development discussions between the university management and colleges. The units' performance target negotiations deal with student feedback, and if the average assessment for a course is very low (e.g. 2.5 or lower), Dean shall intervene and discuss about the topic with the faculty concerned. In addition, the pass/fail record of each course is followed and discussed in the meeting between the heads of the degree programs organized by the dean.

The students of degree program make a summary of the open feedback for each course. A conversation of the feedback between the student and the teachers of the courses and the head of the degree program is organized twice a year (**Appendix MATH11**).

Also the university teaching studies and the Teacher's Quality Manual provide the teachers with methods to develop their courses.

Evaluation of the success of the degree program

The university management, college management and heads of degree programs shall ensure that the education provided by the university is efficient and of a high standard. Success of the degree program is evaluated in many ways, which are described in the following.

Competence of graduates

Skills and knowledge accumulated by students during the entire education process are demonstrated in a final project, which is prepared by all Bachelors' level students. The distributions of the grades of the Math Program are demonstrated in Table 3-5: The grades of the B.Sc. project in 2014-2012. In 2012-2014, the most common project grade has been 4 as in project handbook (**appendix ZCS05**)

Table 3-5: The grades of the B.Sc. project in 2014-2012

Grade of the B.Sc. Thesis	2-2.99	3-3.99	4-5	Total
1st semester 2014	11	0	0	11
2nd semester 2013	14	9	2	25
1st semester 2013	8	8	3	19
2nd semester 2012	4	2	4	10
1st semester 2012	7	2	1	10
2nd semester 2011	2	4	1	7

The distribution of the final grade (weighted mean) of the graduates in 2014 is presented in Table 3-6: Final grades of the graduates in 2014.

Table 3-6: Final grades of the graduates in 2014

Degree programme	1-1,99	2 – 2,99	3 – 3,99	4 – 5
Bachelor		11	12	3

Quantitative results of a degree program

Information on the number of graduates and the time in which their degree was completed Table 3-7: Graduates per degree programme during 2011-2014 is compiled into statistics. The employment of graduates a year after graduation to B.Sc. is generated by Statistics KSA Table 3-8: Alumni activity a year after graduation.

The first B.Sc. graduated in 2011. The students who had started study in a university before autumn 2007 had a right to continue studies in the B.Sc. degree, but they had to graduate not later than in July 2012. This can be seen also as a higher median time of study

in 2012 in Table 3-7: Graduates per degree programme during 2011-2014.

Table 3-7: Graduates per degree programme during 2011-2014

Year	2014	2013	2012	2011
Degree Prog. B.Sc	28	44	20	7

A year after the graduation, the students were employed very well in 2011-2013, Table 3-8: Alumni activity a year after graduation (**appendix ZCS09**).

Table 3-8: Alumni activity a year after graduation

	2013	2012	2011
Employed	77 %	92 %	86 %
Unemployed	10 %	0 %	0 %
Employed with part-time studies	13 %	8 %	14 %

Staff-student ratio

The Table 3-9: Students per teacher per year in below presents the teaching staff ratios for the degrees organized by the Institute of Mathematics which hosts the Department of mathematics. The teaching staff comprises professors, associate professors, assistance professors, post-doctoral researchers, Lecture and doctoral students.

Table 3-9: Students per teacher per year in Mathematics Program

	2014	2013	2012	2011	2010
Student-staff ratio	11.3	10.4	11.3	10.1	12.8

Satisfaction in the education
As part of this self-assessment report, student feedback of the degree programs is in (**Appendix MATH11)**

Satisfaction in ZCS education is surveyed among ZCS graduates at the time of graduation, after five and fifteen years in the world of work, and among their employers.

Graduate feedback is collected from all ZCS students at the time of their graduation Table 3-10: Feedback from graduated B. Sc. of Science in 2010 -2014, both Finnish and international students. The feedback is gathered together annually in February- March, and the results are reported on the university level on the intranet and divided and delivered into the degree programs. Quality manager is responsible for this process together with Student Services (**appendix ZCS09**).

Table 3-10: Feedback from graduated B. Sc. of Science in 2010 -2014

Satisfaction of the graduate on…	2014	2013	2012	2011
Course content		3,7	3,5	3,4
Professional abilities	3,6	3,8	3,6	3,7
Transferable skills	3,3	3,4	3,2	3,1
Knowledge on my own field	3,6	3,8	3,4	3,6
The ability to apply theoretical knowledge into Practice	3,3	3,6	3,2	3,6
Study guidance and atmosphere in the Department	3,7	3,6	3,5	3,3

Appendices:
ZCS01. Zulfi, College of Sciences Strategy Plan 2013
ZCS02. Teacher's Quality Manual
ZCS03. Quality Guide for Studying and Learning
ZCS04. The calculation of the Final Grade (GPA)
ZCS05. Project Handbook
ZCS06. Excellence Awards for employee
ZCS09. Graduates Unit Handbook
ZCS11. Quality Manual
MATH10. Course Feedback (example)
MATH11. Statement of Students
MATH13. Diploma supplement (example)
MATH15. a. Direct PLO Assessment & b. Indirect PLO Assessment
MATH16. Staff C. V.

7. Documentation and Transparency

7.1   Relevant regulations

To receive the Degree of Bachelor of Mathematics   from College of Science, at least 80% of credit hours including the Bachelor's project, have to be passed in this university (total degree 137 credits).   The head of the degree program makes the decision of the courses included in the degree of an individual student.

The detailed regulations of the degree are given in the University Regulations on Education and the Completion of Studies (**Appendix MU03**).

7.2   Diploma Supplement

Diploma supplement is formulated by following the directions of the college council and always attached to the B.Sc. degree certificate. (**Appendix MATH13**). Diploma supplement is attached to the degree certificate along with the transcript of records. It includes the information about the College, courses included into degree, as well as the grades of the courses and the structure of the degree (**Appendix MU03**, University regulations on Education and the Completion of Studies). Both obligatory and electives subjects are given an overall grade. The overall grade is the average of all the MU courses completed by the student in the subject in question, weighted according to the Credit Hour of each course (**Appendix ZCS04**).

Appendices:
  MU03. Implementation Rules of Undergraduate Study and Examinations
  ZCS04. The calculation of the Final Grade (GPA)
  MATH13. Diploma supplement (example)

8   Equal opportunities and diversity

The Careers and Employment Service at Majmaah University promotes and celebrates this diversity both as a service provider and in its interaction with students and graduates to ensure that all students are able to access employment opportunities whilst also recognizing that some students and graduates may experience barriers when looking for employment.
Majmaah University is committed to supporting mass participation in higher education as part of its contribution to equality and social justice.
The University provides quality higher education through a curriculum which embodies the central values of equality.
Majmaah University aims to increase learning opportunities for all students especially for those who have traditionally been denied access to higher education.
The Careers and Employment Services' commitment to equal opportunities
Majmaah University Careers and Employment Service (CES) endeavors to support this mission statement by Promoting equality of opportunity as a provider of services to all Majmaah University students and graduates. Promoting equality in its interaction with employers and outside agencies

8.1   Services to students and graduates

Careers and Employment Service (CES) are committed to offering a high quality service to all of our clients and supporting their transition into the world of work. CES aim to help all students and graduates compete on equal terms in the marketplace by the following (**Appendices ZCS09, ZCS10)**:
  1. guide students and graduates through their career choices and the application process for jobs and further study
  2. offer guidance regarding strengthening and enhancing these applications
  3. Give advice and support to counter any discrimination faced.

8.2   Access to guidance services

The CES is committed to developing a service which can be accessed easily by all Majmaah University students and graduates.

In this regard, CES aim to make our services disability friendly and to offer services at times to meet the needs of all students.

CES therefore runs an open access Careers Resource Area on the Zulfi Campus; an evening service by appointment and e-mail guidance.

8.3   Countering discrimination

Graduate employment and training has become an increasingly competitive area and students from a non-traditional background can often feel disadvantaged when making career choices and entering the job market.

If you feel that CES has not addressed issues of age, gender, color, race, nationality, ethnic or national origin, religion, disability in any of the services we provide to students and graduates, then please let us know.

8.4   The College's Commitment

No prospective or actual student or member of staff will be treated less favorably than any other, whether before, during or after their study or employment at Zulfi College of Science on one or more of the following grounds, except when such treatment is within the law and determined by lawful requirements: age; color; disability; ethnic origin; marital status; nationality; national origin; parental status; race; religion or belief; gender; or length or type of contract (e.g. part-time or fixed-term).

With regard to students, this policy applies to (but is not limited to) admissions, to teaching, learning and research provision, to scholarships, grants and other awards under the College's control, to student support, to accommodation and other facilities, to health and safety, to personal conduct and to student complaints and disciplinary procedures.

The College will also avoid, in the fields of employment, education and provision of goods, facilities, services and premises the use of ostensibly neutral criteria which have disproportionate adverse impact on those of a particular age; color; disability; ethnic origin; marital status; nationality; national origin; parental status; race; religion or belief; gender; or length or type of contract (e.g. part-time or fixed-term).

In order to realize its commitment, the College will:
- promote the aims of this policy;
- be proactive in eliminating discrimination, including harassment and bullying, through
- training and the production and dissemination of codes of practice and guidance;
- have regard to its obligations under relevant legislation, including the requirement to
- carry out impact assessments in certain areas, and for its policies, codes of practice and
- guidance to mirror the same and be changed to meet the demands of new legislation;
- whilst acknowledging that they are not legally binding, have regard to any Codes of

- Practice issued or adopted by the Commission for Equality and Human Rights;
- make this policy, as well as all codes of practice and guidance available to all staff and
- students;
- regularly review the terms of this policy and all associated codes of practice and
- Guidance.

8.5 Responsibilities

8.5.1 College Council Responsibility

The **College Council** is the main body in College dedicated to delivery of the College's diversity and equal opportunities objectives. The **College Council** is convened by the Bursar and meets once per Term, regularly in seventh week and reporting to the third Governing Body meeting of Term. The **College Council** Terms of Reference read as follows:
The **College Council** is responsible for the development, implementation, monitoring, prioritization and review of policies, procedures and practice to support the College's Equal Opportunities Policy in relation to employees (Fellows and staff) students, visitors and others closely associated with the College.

8.5.2 Departments Responsibility

Heads of program operating departments are responsible for the day to day Implementation and delivery of the Department objectives for diversity and equal opportunities in their department.

8.5.3 The Domestic Bursar

The Domestic Bursar has primary responsibility for facilitating the accessibility of the College's buildings for disabled users.

8.5.4 All staff and students

This policy applies to all members of the College, both students and staff, whether permanent, temporary, casual, part-time or on fixed-term contracts, to job applicants, to student applicants, current and former students, to associate members and to visitors to the College.
These members of the College have a duty to act in accordance with this policy, and therefore to treat colleagues with dignity at all times and not to discriminate against or harass other students or members of staff, whether junior or senior to them.
The College expects all its staff and students to take personal responsibility for familiarizing themselves with this policy and to conduct them in an appropriate manner at all times to respect equality of opportunity for all staff, students, applicants and visitors. The College regards any breach of this policy by any employee(s) or student(s) as a serious matter to be dealt with through its agreed procedures and which may result in disciplinary action and possibly dismissal.

8.5.5 Complaints
Zulfi College takes seriously any breach of this policy. Disregard of this policy may result in

disciplinary action up to and including dismissal. The College encourages any prospective or current student or member of staff who has a complaint concerning a breach of this policy to bring such a complaint to the College. Any member of the College may use the grievance procedures given in the Student Handbook, the Staff Handbook and the Notes for New Fellows to complain about discriminatory conduct. The College is concerned to ensure that staff feel able to raise such grievances and no individual will be penalized for raising such a grievance unless it is untrue and made in bad faith. **(Appendix MU04)**

8.6 Corrective Procedures

8.6.1 Discipline & **Monitoring**

Any employee or student who harasses any other employee or student on any of the grounds covered in this Policy will be subject to the relevant College disciplinary procedure. In serious cases, such behavior will be deemed to constitute gross misconduct and, as such, will result in summary dismissal in the absence of mitigating circumstances.

Monitoring of the Equal Opportunities Policy is the responsibility of the **College Council**.

8.6.2 Positive Action

Should inequalities become apparent, as a result of the College's monitoring procedures, positive action will be taken to redress the imbalance, including such measures as:
1. advertising jobs in ethnic or female interest publications, as appropriate
2. introducing assertiveness training
3. introducing English language training
4. encouraging under-represented groups to apply for suitable training posts
5. Making contact with disabled people via the local Job Centre.

Appendices:
 MU04. Discipline Regulations
 ZCS09. Graduates Unit Handbook
 ZCS10. Academic Advising

9   Appendices:

Majmaah University

MU01. The Statute of the council of Higher Education and Universities (University Act)

MU02. Government Decree on Majmaah University & college of Sciences

MU03. Implementation Rules of Undergraduate Study and Examinations

MU04. Discipline Regulations

MU05. Regulations Governing the Promotion of Faculty Member

MU06. Regulations for Universities Financial Affairs

MU07. Regulations for Non Saudi

MU08. Anti-Smoking Regulations

MU09. Study and enrollment

Zulfi, College of Sciences

ZCS01. Zulfi, College of Sciences Strategy Plan 2013

ZCS02. Teacher's Quality Manual

ZCS03. Quality Guide for Studying and Learning

ZCS04. The calculation of the Final Grade (GPA)

ZCS05. Project Handbook

ZCS06. Excellence Awards for employee

ZCS07. Internal Report from Quality Deanship

ZCS08. Staff Handbook

ZCS09. Graduates Unit Handbook

ZCS10. Academic Advising

ZCS11. Quality Manual

ZCS12. Assessment & Measurement Guide

Mathematics Program:

MATH01. Program Specification

MATH02. Program Handbook

MATH03. Objectives Matrix Models

MATH04. Study Plan

MATH05. a. Learning outcomes of the degree program/ASIIN's SSC criteria

　　　　　b. Learning outcomes Matrix

MATH06. Courses Handbook

MATH07. Teaching methods and Independent Study

MATH08. Workload calculations

MATH09. Course evaluation methods

MATH10. Course Feedback (example)

MATH11. Statement of Students

MATH12. Annual of Mathematics Program report

MATH13. Diploma supplement (example)
MATH14. Facilities and Equipment
MATH15. a. Direct PLO Assessment & b. Indirect PLO Assessment
MATH16. Staff C. V.
MATH17.
MPU01. **Consistency between University & college Missions**
MPU02. **Consistency between college & Mathematics Programme Missions**
MPU03. **Consistency between Mathematics program Missions and Objectives**
MPU04. **Consistency between Student learning Outcomes and program Objectives**
MPU05. **Consistency between Program Outcomes and NCAAA Outcomes.**