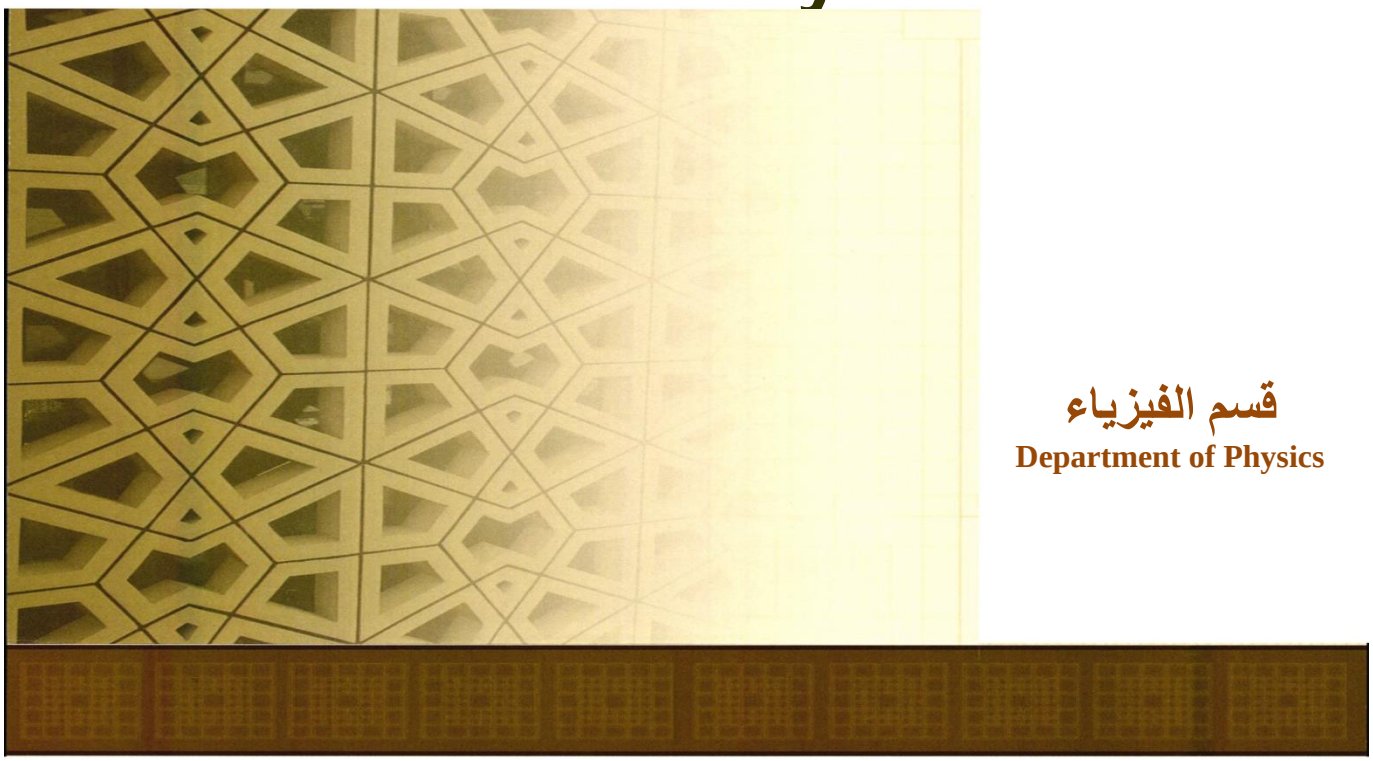
Program Specification

(T3)

Bachelor's degree program in

Medical Physics



قسم الفيزياء

Department of Physics

Program Name: **Medical Physics &** Code: **40301**
Qualification Level **: Eight levels**
Department**: Physics**
College**: Applied Science**
Institution**:Umm Al-Qura University**

Content

A. Program Identification and General Information

1. Program Main Location:

Abdiyyah Campus, Makka, Western Region, kingdom of Saudi Arabia (KSA).

2. Branches Offering the Program:

Al-Zaher Campus, Al-Zaher region, Makka, Western Region, KSA.

3. Reasons for Establishing the Program:

(Economic, social, cultural, and technological reasons, and national needs and development, etc.)

Bachelor of Medical Physics program is an outstanding program, where the educational objectives for the educational subjects which constitute the program to be in agreement with the community needs of the Makka region, specially, all other KSA hospital sectors (private and government), and the labor market through the rest of the world. This was achieved by the aid of a highly qualified teaching staff whose qualified scientifically, professionally, and have a high level of efficiency.

a. **Summarize economic reasons, social or cultural reasons, technological developments, national policy developments or other reasons.**

Economic reasons

Preparing of medical physicists that enables to satisfy the needs in positions in serving at the radiation protection, nuclear medicine, radiotherapy departments in hospitals and radiological departments. In addition to, supplying the labor market with highly qualified medical physics graduates that will reduce the hiring of foregin medical physicists for research and development of medical physics departments center.

Socio- cultural reasons

• The Saudi National policy in health care is to provide the best care for Saudi citizens and that is can be achieved by graduates of the new generation who are able to work effectively in medical physics departments in the Kingdom so as to serve the public community and developing the practice in medical physics departments center.

• Cultural sensitive care is one of the needs of Saudi patients that are not to be supplied unless by adopt innovation in the field of radiation protection, nuclear medicine, radiotherapy departments practice in hospitals and enriching scientific research to serve the developments in national politics.

Technological developments

The Medical physics program emphasizes the use of the most updated technological developments in the field of patient diagnosis, therapy, education training and research. Moreover, the medical physics program promotes talented students to develop technological devices as a result of supportive scientific atmosphere

4. Total Credit Hours (C. H) for Completing the Program: (136 C. H**)**

The standard duration of medical physics has a degree program of four years (8 semesters). The student must take a number of courses to reach the total of 136 KSA credits required for the Bachelor's degree program, all subjects are obligatory. The Bachelor's degree begins with the first year, which including basic courses such as General Physics (1), Introduction to Mathematics, Computer Skills & English Language. Almost all the students in the Bachelor's degree program study the same major courses.

The training field in hospital project and a seminar (11 C. H) are included as a major subject. The program structure allows the student for time to be spent at another higher education institution or on a practical placement without loss of time.

The Description of the Medical Physics Curriculum Modules (Study Plan 1437 A.H)

Course Code	Course Title	Required or Elective	Credit Hours	College or Department
First year Level 1 (Semester 1)				
4041101	Calculus (1)	R	4	College of Applied Science / Dept. of Mathematics
4021101	General Chemistry	R	4	College of Applied Science / Dept. of Chemistry
7004101	English Language - General	R	4	English Language Institute
605101	Holy Quran I	R	2	
601101	Islamic Culture I	R	2	
Total			16	
Level 2 (Semester 2)				
4031101	General Physics	R	4	College of Applied Science / Dept. of Physics
4011101	General Biology	R	4	College of Applied Science / Dept. of Biology
7004102	English for Science	R	4	English Language Institute
501101	Arabic Language	R	2	College of Arabic Language
102101	The Biography of the Prophet Mohammad (PBUH)	R	2	
Total			16	
Second year Level 3 (Semester 3)				
4032280	Fundamentals of Medical physics	R	4	College of Applied Science / Dept. of Physics
4032102	General physics (2)	R	4	College of Applied Science / Dept. of Physics

4032121	Electricity and magnetism	R	4	College of Applied Science / Dept. of Physics
4041502	Differentiation and Integration (2)	R	4	College of Applied Science / Dept. of Mathematics
4012312	Cell Biology	R	2	College of Applied Science / Dept. of Biology
Total			**18**	
Level 4 (Semester 4)				
4032293	Biomechanics	R	3	College of Applied Science / Dept. of Physics
4032141	Theoretical Methods in Physics(1)	R	4	College of Applied Science / Dept. of Physics
4032150	Modern Physics	R	4	College of Applied Science / Dept. of Physics
4013331	Biology-Physiology	R	3	College of Applied Science / Dept. of Biology
605201	Holy Quran II	R	2	
601201	Islamic Culture II	R	2	
Total			**18**	
Third year				
Level 5 (Semester 5)				
4033290	Physics of Medical Ultrasound	R	2	College of Applied Science / Dept. of Physics
4033281	Physics of medical laser	R	2	College of Applied Science / Dept. of Physics
4033285	Radiation Medical physics(1)	R	4	College of Applied Science / Dept. of Physics
4033298	Physics of cell membrane & Macromolecules	R	2	College of Applied Science / Dept. of Physics
4033145	Quantum Mechanics (1)	R	4	College of Applied Science / Dept. of Physics
601301	Islamic Culture III	R	3	
Total			**17**	
Level 6 (Semester 6)				
4033283	Health Physics	R	3	College of Applied Science / Dept. of Physics
4033292	Radiation Medical physics(2)	R	4	College of Applied Science / Dept. of Physics
4034170	Solid State Physics(1)	R	4	College of Applied Science / Dept. of Physics
4033132	Electromagnetism (1)	R	3	College of Applied Science / Dept. of Physics
4034160	Nuclear Physics	R	4	College of Applied Science / Dept. of Physics

Total			**18**	
Fourth year				
Level 7 (Semester 7)				
4034291	**Computer Applications in Medical physics**	**R**	**2**	College of Applied Science / Dept. of Physics
4034289	**Physics of Medical Imaging**	**R**	**3**	College of Applied Science / Dept. of Physics
4034286	**Physics of radiotherapy**	**R**	**4**	College of Applied Science / Dept. of Physics
4034295	**Physics of Nuclear Medicine**	**R**	**4**	College of Applied Science / Dept. of Physics
4034296	**Physic of Bio-Material**	**R**	**3**	College of Applied Science / Dept. of Physics
605301	**Holy Quran III**	**R**	**2**	
Total			**18**	
Level 8 (Semester 8)				
4034998	**Hospital Training**	**R**	**11**	College of Applied Science / Dept. of Physics
605401	**Holy Quran IV**	**R**	**2**	
601401	**Islamic Culture IV**	**R**	**2**	
Total			**15**	

Total credit hours 136.

5. Learning Hours: (7102 Hour)

The length of time that a learner takes to complete learning activities that lead to the achievement of program learning outcomes, such as study time, homework assignments, projects, preparing presentations, library times).

Student learning hours or workload is set at a level that avoids structural pressure on training, quality and requirements for the level of study. Projected time budgets are realistic, so that the program can be studied within the standard period of study for the degree. The basic unit of the studies is a credit point. A course is scored by the assessment required to pass it. To complete the studies of one academic year (2 semesters) requires on average contact 682 hours/year, which corresponds to approximately 31 credit Hour in KSA system (60 ECTS credit points).

One credit point equals to approximately 29-30 hours of workload (7102 ÷ 240= 29.5). This includes the hours spent in face-to-face teaching, individual studying, as well as homework, assignments, projects, preparing presentations, library and times preparation for and taking part in the examinations.

The degree program is composed so that by following the course handbook, the medical physics B.Sc. degree can be completed within the standard period of study (i.e., it is possible to take 31 credits per year on average), and the maximum of 60 credits is not exceeded in any year (in case summer study).

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 courses also by knowledge gained otherwise.

6. Professional Occupations/Jobs:

- Medical Physicist (specialist). (According to the manual classification and registration of occupational health practitioners, Saudi Council of health Specialties).

- Researcher.
- Instructor.

7. Major Tracks/Pathways (if any)**: Not Applicable (N. A).**

Major track/pathway	Credit hours (For each track)	Professional Occupations/Jobs (For each track)
1. N. A		

8. Intermediate Exit Points/Awarded Degree (if any)**:**

Intermediate exit points/awarded degree	Credit hours
1. An ordinary degree (Bachelor's Degree) for a student who has completed the specified program learning outcomes and achieved a combined total of 136 credit hours (8 levels at least).	**136 C. H**
2.	

B. Mission, Goals, and Learning Outcomes

1. Program Mission:

Realizing creativity and distinction in higher education and scientific research in the field of pure and medical physics. The mission is to prepare graduates with high scientific and technical skills who are capable of serving and developing the community.

2. Program Goals:

The Program General Goals of the Medical Physics Program are accomplished with other intended target objectives of each Goal as follows:

1- Acquired basic knowledge of medical physics related to human anatomy and physiology of the body. **Objectives**: *After completing this program, students will:* (a) Acquire the knowledge of the normal structure and function of the body and its major organ systems with emphasis on content applicable to clinical diagnostic imaging and/or radiation oncology. (b) Define the basics of radiation and radioactivity, its properties, units of measure, dosimetry measurement concepts and methods.(c) Recognize detailed knowledge of radiotherapy, nuclear medicine, medical imaging. (d) Enable the graduate to know the radiation safety practices and procedures, including the determination of radiation shielding requirements. (e) List the basics of the biological effects of radiation and its application for radiation safety and radiation treatment.

2- Develop the ability to perform the clinical support procedures required by a medical physicist. **Objectives**: *After completing this program, students will:* (a) Develop the ability to design and complete independent research projects. (b) Demonstrate the ability to communicate effectively, both orally and in writing, with colleagues, College, scientific journals, and research funding agencies. (c) Comply with all applicable regulations and requirements regarding health and safety of self and of others, and of clinical and research ethics and procedures. (d) Be trained to bridge the gap between technologists and physicians.

3- Emphasized the student's ability to retrieve, manage, and utilize information for solving problems for the implementation of radiation safety practices and procedures including the determination of radiation shielding requirements. **Objectives**: *After completing this program, students will:* (a) Develop expertise in the critical assessment of technical systems in medicine (b) Perform a scientific (life-science related) project (c) Successfully tackled technical issues related to the medical physics field.

4- Practice, ethical, responsible, reliable, and dependable behavior in all aspects of their professional lives, and a commitment to the profession and society. **Objectives**: *After completing this program, students will:* (a) Illustrate the ethical, legal, professional, security and social issues and responsibilities (b) Be compassionate in the treatment of patients and research subjects, and respect their privacy and dignity.

3. Relationship between Program Mission and Goals and the Mission and Goals of the

Institution/College.

Consistency between University & College Missions

University Mission keywords		Umm Al-Qura University Mission Provision of distinctive scientific education and research that serve the community and Hajj and Umrah, and contribute to the development of the knowledge-based economy in accordance with the Saudi Vision 2030.		
College Mission keywords		Pioneering in Education	Scientific research	Service of the local and global society
College Mission n	Provision of university education and graduate studies for students of the college.	√		√
	Development of scientific and practical skills	√	√	√
	Develop the interpersonal skills both inside and outside the college		√	√
	Encourage of College for scientific research members, and expansion in the areas of translation, authoring scientific books		√	√
	Participate in community service	√	√	√

Umm Al-Qura University Mission:

Provision of distinctive scientific education and research that serve the community and Hajj and Umrah, and contribute to the development of the knowledge-based economy in accordance with the Saudi Vision 2030.

The current mission of College of Applied Sciences
Accomplishment of the purposes and objectives of higher education and the provision of university education and graduate studies for students of the college, with the scientific and practical skills development, and interpersonal skills both inside and outside the college, with the encouragement of College for scientific research members, and participate in community service, and expansion in the areas of translation, authoring scientific books.

Consistency Between College & Medical Physics Program Missions

		College Mission Accomplishment of the purposes and objectives of higher education and the provision of university education and graduate studies for students of the college, with the scientific and practical skills development, and interpersonal skills both inside and outside the college, with the encouragement of College for scientific research members, and participate in community service, and expansion in the areas of translation, authoring scientific books.				
		Provision of university education and graduate studies for students of the college.	Development of scientific and practical skills	Develop the interpersonal skills both inside and outside the college	Encourage scientific research and expansion in the areas of translation, authoring scientific books	Participate in community service
Medical Physics Mission	Commitment to Excellence	√	√	√	√	√
	Transmission of Knowledge	√	√	√	√	√

	Serve and Develop Community	√		√	√	√

Medical Physics Program Mission:

The program has a strong commitment to excellence in the discovery and transmission of knowledge in the field of medical physics, to serve and develop community.

Consistency between Medical Physics Program Missions & Objectives

		Program Mission The program has a strong commitment to excellence in the discovery and transmission of knowledge in the field of Medical Physics, to serve and develop community.		
		Commitment to Excellence	Transmission of Knowledge	Serve and Develop Community
Medical Physics Program	Objective (1)	√	√	√
	Objective (2)		√	
	Objective (3)	√		√
	Objective (4)	√	√	√

1-Acquired basic knowledge of medical physics related to human anatomy and physiology of the body.
2-Develop the ability to perform the clinical support procedures required by a medical physicist.
3- Emphasize the student's ability to retrieve, manage, and utilize information for solving problems for the implementation of radiation safety practices and procedures including the determination of radiation shielding requirements.
4- Practice ethical, responsible, reliable, and dependable behavior in all aspects of their professional lives, and a commitment to the profession and society.

4. Graduate Attributes:

List any special student characteristics or attributes beyond normal expectations that the institution, college or department is trying to develop in all of its students. (eg. Eg. Particularly good at creative problem solving, leadership capacity, commitment to public service, high level of skills in IT). For each special attribute indicate the teaching strategies and student activities to be used to develop it.

Special Attributes	Strategies or Student Activities to Develop these Special Attributes
Commitment to the environment issues	**Special emphasis on environmental awareness in the curriculum throughout the program.**
Observing safety rule and regulations when handling the Radio-pharmaceutical	**Including the safety aspects in the lecture and laboratory courses.**
Quality control awareness	**Including quality control of. Radio pharmaceutical in the laboratory courses Inclusion of case studies involving inadequate quality control in radiotherapy and in relevant courses.**

5. Program learning Outcomes*

Knowledge: ***Summary description of the knowledge to be acquired and on completing this program, students will be able to:***	
K1	Acquire the major aspects of nature and subject of medical physics and the application of physics to medicine.
K2	List matter in various forms, including crystals, semiconductors, atoms, nuclei and understand the principles of laser and its application in medicine.
K3	Recognize Bioinformatics in order to know how to analysis data which is used to diagnose with the aid of different medical devices such as X- ray machines, gamma camera, accelerator and nuclear magnetic resonance.
K4	Define different quantitative, mathematical science and physical tools analyze problems and list some foundations of systems theory to solve and analysis different problems.
K5	Recognize the nature, properties, dosimetery of radiation and basics of radiation protection and also medical effects of ionizing and non-ionizing radiation.
K6	Outline the principles of physics of different medical radiation devices and their modern advances, especially in medical radiation therapy and different applications in medical physics.
Skills: ***Summary description of the skills to be acquired and on completing this program, students will be able to:***	
S1	Reorganize mathematical and physical formulas and demonstrate skills of critical thinking and analytical reasoning to solve problems in medical physics and related fields of studies.
S2	Formulate and test hypotheses using appropriate experimental design and analysis of data (Computer simulation) and integrate IT-based solutions into the user environment effectively.
S3	Analyze and evaluate information by using computational tools to interpret experimental data relevant to medical physics by using packages from different theoretical and experimental resources, and perspectives.
S4	Operate some medical instruments such as that used for the diagnosis of different diseases in medical centers and demonstrate competency in laboratory techniques and safety.
S5	Use scientific literature effectively and prepare technical reports that for individual student or making a group of researchers.
S6	Justify ethical, social and legal responsibilities concerning medical physics.
S7	
Competence: ***Summary description of the Competence to be acquired and on completing this program, students will be able to:***	
C1	Illustrate and employ the processes of scientific inquiry and research methods through use effective information and communications technology (IT) tools and use the basic software, to ensure globally understand of medical physics issues.
C2	Demonstrate scientific concepts and analytical argument, in a clear and organized way, verbally and in writing.
C3	Implement all kinds of relevant information in medical physics through the use of local and internationally accessible libraries, information database, and electronic data and use that information in problem solving activities.
C4	Work effectively in groups as well as individuals and appraise the cooperation through teamwork to assess and criticize various emergent problems.
C5	Prove capabilities to contribute to the generation of new idea/concepts/technical approaches to experimental research questions and justify ethical, social and legal responsibilities concerning the scientific regulations.
C6	Summarize, document, report, and reflect on own findings.

* Add a table for each track and exit Point (if any)

C. Curriculum

1. Curriculum Structure

Program Structure	Required/ Elective	No. of courses	Credit Hours	Percentage
Institutional Requirements	Required	**10**	**21**	**24.39%**
	Elective			
College Requirements	Required	**9**	**29**	**21.95%**
	Elective			
Program Requirements	Required	**21**	**75**	**51.21%**
	Elective			
Capstone Course/Project	--	**--**	**--**	**--**
Field Experience/ Internship (Hospital Training)	Required	**1**	**11**	**2.44%**
	Elective			
Others	Elective			
Total		**41**	**136**	**100%**

* Add a table for each track (if any)

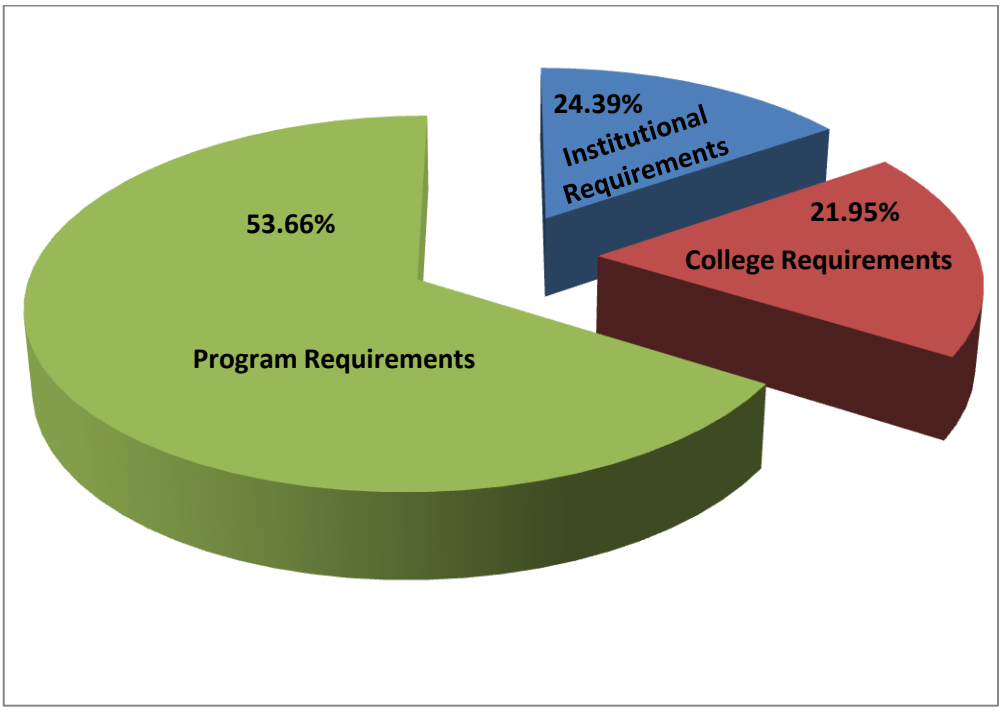
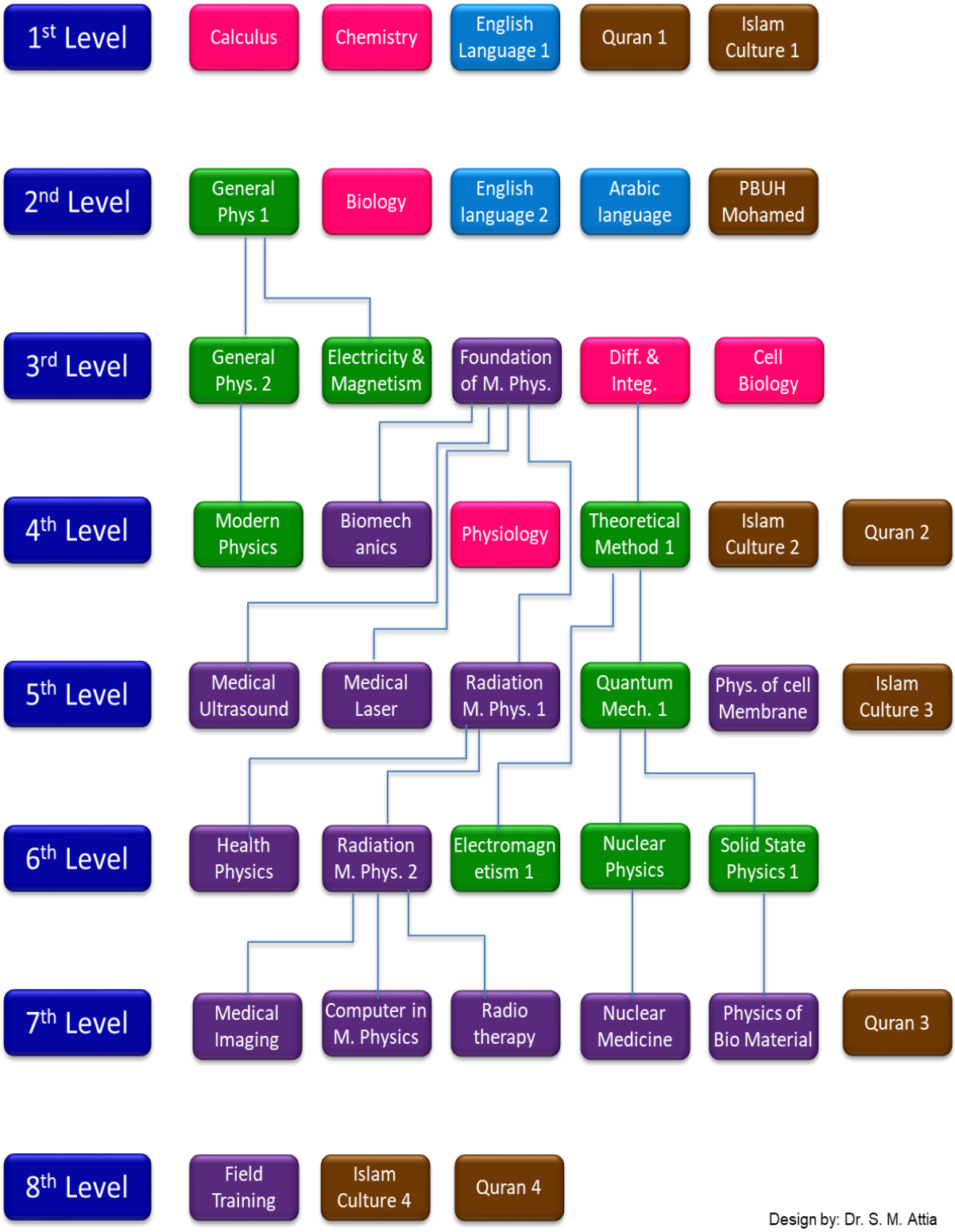


Figure 1: The Curriculum Structure of the program.

2. Program Study Plan 1437

Curriculum Scheme for Medical Physics Program Plan (37)



Design by: Dr. S. M. Attia

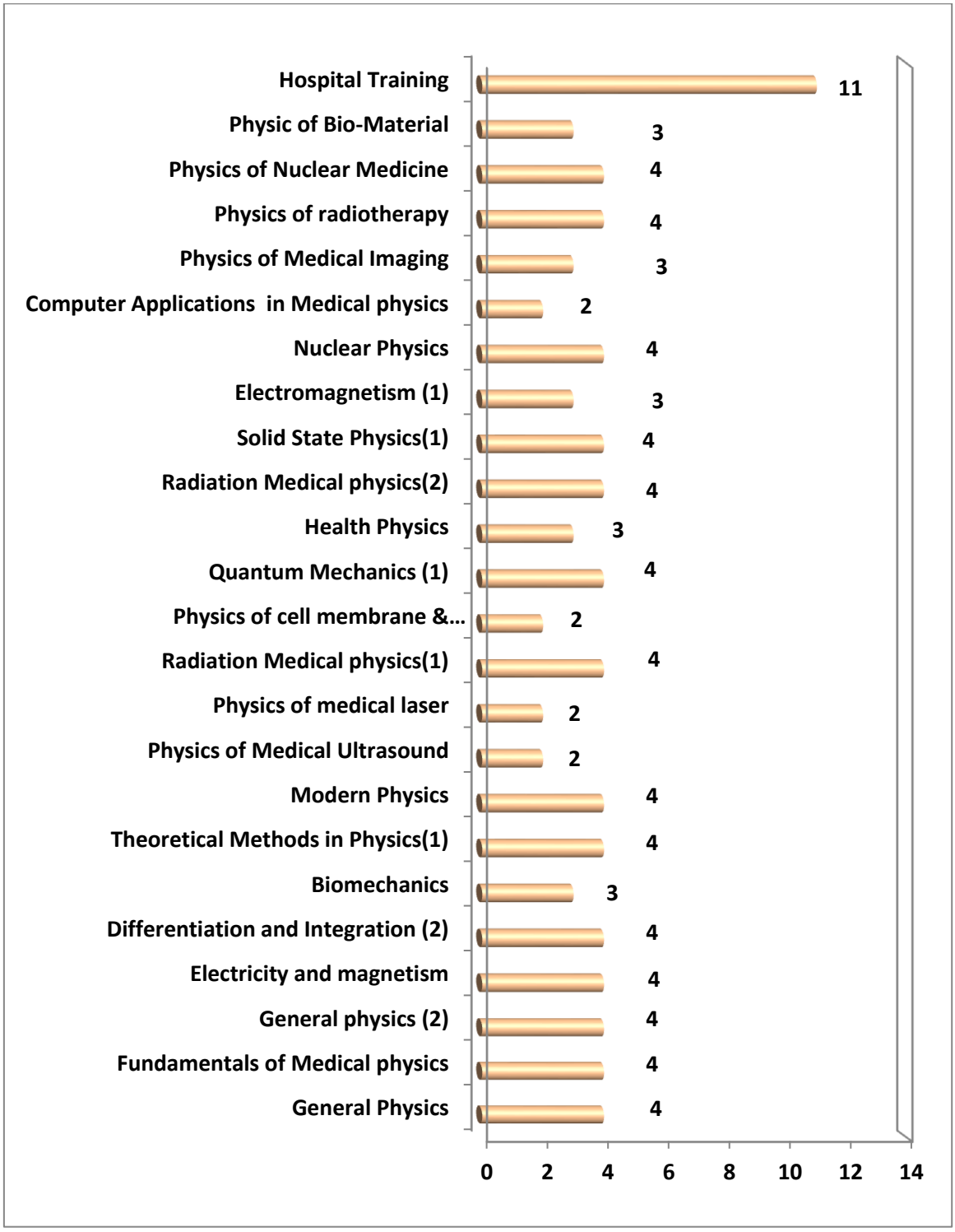


Figure 2: Credit hours distribution.

Level	Course Code	Course Title	Required or Elective	Pre-Requisite Courses	Credit Hours	Type of requirements (Institution, College or Department)
Level 1	4041101	Calculus (1)	R	-	4	College of Applied Science
	4021101	General Chemistry	R	-	4	College of Applied Science
	7004101	English Language – General	R	-	4	English Language Institute
	605101	Holy Quran I	R	-	2	Institution
	601101	Islamic Culture I	R	-	2	Institution
Level 2	4031101	General Physics (1)	R	-	4	College of Applied Science
	4011101	General Biology	R	-	4	College of Applied Science
	7004102	English for Science	R	English Language – General (7004101)	4	College of Applied Science
	501101	Arabic Language	R	-	2	College of Applied Science
	102101	The Biography of the Prophet Mohammad (PBUH)	R	-	2	Institution
Level 3	4032280	Fundamentals of Medical physics	R	General Physics (1) (4031101)	4	Dept. of Physics
	4032102	General physics (2)	R	General Physics (1) (4031101)	4	Dept. of Physics
	4032121	Electricity and magnetism	R	General Physics (1) (4031101)	4	Dept. of Physics
	4041502	Differentiation and Integration (2)	R	Calculus (1) (4041101)	4	College of Applied Science
	4012312	Cell Biology	R	Calculus (1) (4041101)	2	College of Applied Science
Level 4	4032293	Biomechanics	R	Fundamentals of Medical physics (4032280)	3	Dept. of Physics
	4032141	Theoretical Methods in Physics (1)	R	Differentiation and Integration (2) (4041502)	4	Dept. of Physics
	4032150	Modern Physics	R	General physics (2) (4032102)	4	Dept. of Physics
	4013331	Biology-Physiology	R	Cell Biology (4012312)	3	College of Applied Science
	605201	Holy Quran II	R	Holy Quran I (605101	2	Institution
	601201	Islamic Culture II	R	Islamic Culture (601101)	2	Institution
Level 5	4033290	Physics of Medical Ultrasound	R	Fundamentals of Medical Physics (4032280-4)	2	Dept. of Physics
	4033281	Physics of medical laser	R	Fundamentals of Medical Physics (4032280-4)	2	Dept. of Physics
	4033285	Radiation Medical physics (1)	R	Fundamental of Medical Physics (4032280-4)	4	Dept. of Physics
	4033298	Physics of cell membrane & Macromolecules	R	Animal Physiology (4013331-3)	2	Dept. of Physics
	4033145	Quantum Mechanics (1)	R		4	Dept. of Physics
	601301	Islamic Culture III	R	Islamic Culture II (601201-2)	4	Institution
Level 6	4033283	Health Physics	R	Fundamental of Medical Physics (4032280-4)	3	Dept. of Physics
	4033292	Radiation Medical physics (2)	R	Radiation Medical physics(1) (4033285)	4	Dept. of Physics
	4034170	Solid State Physics (1)	R	Quantum Mechanics (1) (4033145)	4	Dept. of Physics
	4033132	Electromagnetism (1)	R	Theoretical Methods in Physics (1) (4032141)	3	Dept. of Physics
	4034160	Nuclear Physics	R	Quantum Mechanics (1) (4033145)	4	Dept. of Physics
Level 7	4034291	Computer Applications in Medical physics	R	Radiation Medical physics(2) (4033292)	2	Dept. of Physics
	4034289	Physics of Medical Imaging	R	Radiation Medical physics(2) (4033292)	3	Dept. of Physics
	4034286	Physics of radiotherapy	R	Radiation Medical physics(2) (4033292)	4	Dept. of Physics
	4034295	Physics of Nuclear Medicine	R	Radiation Medical physics(2) (4033292)	4	Dept. of Physics
	4034296	Physic of Bio-Material	R	Solid State Physics(1) (4034170)	3	Dept. of Physics
	605301	Holy Quran III	R	Holy Quran II (605201)	2	Institution
	4034998	Hospital Training	R	-	11	Dept. of Physics
	605401	Holy Quran IV	R	Holy Quran III (605301)	2	Institution

Level	Course Code	Course Title	Required or Elective	Pre-Requisite Courses	Credit Hours	Type of requirements (Institution, College or Department)
Level 8	601401	Islamic Culture IV	R	Islamic Culture III(601301-3)	2	Institution

* Include additional levels if needed
** Add a table for each track (if any)

3. Course Specifications

Insert hyperlink for all course specifications using NCAAA template

https://uq.sa/P2e0sz

4. Program learning Outcomes Mapping Matrix

Align the program learning outcomes with program courses, according to the following desired levels of performance (**I = Introduced P = Practiced M = Mastered)**

In the boxes, indicate courses or experiences where **students are introduced to each outcome (I),** where they have the opportunity to **practice or develop competency (P)**, and where they would **demonstrate mastery (M)**

Course code & No.	Program Learning Outcomes																	
	Knowledge						Skills						Competence					
	K.1	K.2	K.3	K.4	K.5	K.6	S.1	S.2	S.3	S.4	S.5	S.6	C.1	C.2	C.3	C.4	C.5	C.6
Course 4041101	I			I			I	I					I					
Course 4021101	I						I	I						P				P
Course 7004101	I	I							I		I		I	I				
Course 605101	I											I		I				
Course 601101	I											I		I				
Course 4031101	I	I	I				I	I						P		I		P
Course 4011101	I	I	I				I	I						P		I		P
Course 7004102	I	I							I		I		I	I		P		P
Course 501101	I	I							I		I		I	I		I		I
Course 102101	I	I							I		I		I	I		I		I
Course 4032280	I	I	I	I		P	I	I	I	I			I	I	I	I		I
Course 4032102	I			I			I		I				I	I		P		
Course 4032121		I					I	I	I	I	I	I	I	I				I
Course 4041502	I			I			I	I			I	I	I		I		P	P
Course 4012312	I						I	I	I		I				I	I		
Course 4032293	I		I				I, P			I	I, P					P		P
Course 4032141			I	I			I		I				I			I		
Course 4032150	I	I		I			P	P			P		P	P				P
Course 4013331	I						I	I	I		I				I	I		
Course 605201	I											I		I				
Course 601201	P											P		P				P
Course 4033290	I		P			P	P	P	P		P	P	P	P	P	P, M	P	P
Course 4033281	I	P					P		P		P	P	P	P	P			P
Course 4033285	I	P		P	P	P	P			P, M			P			P		P, M
Course 4033298	I	P				P	P	P			P	P	P	P	P	P		P

Course code & No.	Program Learning Outcomes																	
	Knowledge						Skills						Competence					
	K.1	K.2	K.3	K.4	K.5	K.6	S.1	S.2	S.3	S.4	S.5	S.6	C.1	C.2	C.3	C.4	C.5	C.6
Course 4033145	I		I, P				I, P		P		P			I, P		I, P		P, M
Course 601301	P											P		P				
Course 4033283	I	P	P	P			P	P	P				P	P	P	P		
Course 4033292		P, M		P, M	P, M		P, M	P, M	P, M	P, M	P, M				P, M	P, M		
Course 4034170	I	P				P	P	P	P		P	P	P	P	P	P		P, M
Course 4033132	I	P		P			P		P		P	P	P, M	P				P, M
Course 4034160	I	P	P	P	P	P	P	P, M	P, M		P	P	P, M	P		P		P, M
Course 4034291	I		P				I, P	I, P	I, P	I, P				P, M	P, M	P, M		P, M
Course 4034289	P	P	P				P, M		P, M		P, M		P, M		P, M	P, M	P, M	
Course 4034286	P, M	P, M	P, M				P, M	P, M	P, M				P, M	P, M	P, M	P, M		
Course 4034295	P, M	P, M	P, M				P, M		P, M		P, M		P, M	P, M	P, M	P, M	P, M	P, M
Course 4034296	I, P	P	P	P	P	P		P, M	P, M		P, M			P, M		P, M		M
Course 605301	P											P		P				
Course 605401	P, M											P, M		P, M				
Course4034998`	P, M	P, M	P, M	P, M	P, M	P, M	P, M	P, M	P, M	P, M	P, M	P, M	P, M	P, M	P, M	P, M	P, M	P, M
Course 601401	P, M											P, M		P, M				

* Add a table for each track (if any)

5. Teaching and learning strategies to achieve program learning outcomes

Describe policies, teaching and learning strategies, learning experience, and learning activities, including curricular and extra-curricular activities, to achieve the program learning outcomes.

Quality Management and Further Development of physics Program

The university has identified as an institution for training profile and study of courses in official learning, therefore the university can be used continuously for evaluation and further development of the learning outcomes. The Quality of the most important goals of the university's strategy is the education provided by the university (undergraduate student, and master program), research, and support services. The Quality of the teacher guide explains the university's policies on quality as well as the goals and practices relating to the evaluation and measurement of the various activities and the development of the university.

To manage and develop quality assurance, it must apply:

1. Submission of documents and then evaluated it and evidence of quality assurance and development.
2. Submission of the report to assess the standard requirements.

Control in Learning and Teaching.

The University continuously uses a control system for teaching and learning. This ensures taking into

description the standards for the accreditation of study programs. The Learning objectives include disciplinary and interdisciplinary aspects, in particular scientific or artistic talent, the ability to enter skilled employment, the qualification for social engagement and personal development.

A Quality management committee established by the College of Applied Science, Physics Department receives information from the university to continuously improve their programs. The Quality management system described in the quality of the teacher in the university, such as support services includes documents of quality management at the university and other related materials available on [from NCAAA and the internal network of the Umm Al Qura University].

We've been checking on the quality assurance process through:

(1) Questionnaires at the level of staff members of physics department.

(2) Questionnaires to students of physics department.

(3) A copy of the distribution all Standards of self-evaluation of all staff members.

(4) A copy of meetings of the Committee for accreditation and quality.

(5) Department plan was developed and the old plan (1419 H) and the new plan (1433 H).

To evaluate the quality of program implementation, quality committee should give a brief report points of a certain strength, and areas we need to develop, and priorities in implementing. All staff members of the department physics involved in the self-evaluation processes, and cooperate in reporting and performance improvement processes. Developing and updating courses in the physics department to meet international standards and requirements of the market and also, prepare graduates student (Master) with high creative skills in various areas of the medical physics branch.

Quality assurance processes in institutions should involve not only the educational programs, but also other matters such as the facilities and equipment, staffing, relationships with the communities served by the institution and the administrative processes that link all these together. This means that a quality assurance system should involve individuals and academic and organizational units throughout an institution, not only those directly involved in the delivery of educational programs.

Within each of these internal units consideration should be given to their inputs, processes and outcomes, with an emphasis on the quality of the outcomes of the services they provide. In the past considerations of quality were largely based on inputs such as the qualifications of College, provision of equipment and facilities and adequacy of resources. However, while these are still important. The most important consideration is the quality of outcomes, although inputs and the processes used are still significant and standards relating to them must be maintained. The quality assurance and academic accreditation committee of the College of Applied Science as follows in the following

sketch.

6. Assessment Methods for program learning outcomes.

Describe assessment methods (Direct and Indirect) that can be used to measure achievement of program learning outcomes in every domain of learning.

Assessment of Program Effectiveness

However, the assessment of program learning outcomes is an indicator of the achievement of the program, various strategies is used to measure the effectiveness of the program. These strategies are mainly based on the data from graduating students and include:

a. The amount of graduate scholarships of the College of Applied Science for graduate studies

b. Feedback data from graduates to measure the program outcomes, both quantitatively and qualitatively. These program data are collected from graduate students, alumni, and employers.

c. Benchmarking of students/graduates' achievements with those of the peer national program.

Plan for Assessment of achievements of College of Applied Science

The achievements of the College of Applied Science are assessed through a plan related to the mission of the College. The objectives of the strategic plan are dependent on the quality standards. These objectives are designed to follow both of student and staff development, the progress of both research and the community service and the requirement of facilities and resources.

Types of Assessment

The assessment of student learning outcomes is one of the staff of College of Applied Science priorities to ensure the success of teaching. However, the assessment is based on defining the learning outcomes, collecting and analyzing the evidence is the main target to improve the program. Direct and indirect assessments are used in the evaluation of the program success.

Direct Assessment:

The assessment methods are considered as outcome indicators. However, the written exams are direct assessment methods, they are not the only evaluation tools of the courses (Table 3). Several assessment methods such as homework, laboratory work, exercises, quizzes, and seminars etc. may contribute to the total grade of a course. Assessment methods used to measure Student Learning Outcomes are. The Schedule of course evaluation (GPA) is shown in Table.4.

The maximum score for each course is 100 points. The student should have 60 points to pass the course. The system calculated automatically the average and cumulative GPA every semester for all students. The obtained grades listed in the university website are transferred automatically to the students' website. Both the degree and weighted average (GPA) are listed in the student academic record.

The training field project is a compulsory requirement to complete a Bachelor's degree program. The project is

dependent on the performance of students at hospitals that accept his training. The departmental acceptance is required to assess the training project.

Table.3: The schedule of assessment tasks.

Schedule of Assessment Tasks for Students During Semester				
	Assessment task (e.g. Essay, quizzes, group project, examination, oral presentation, participation, etc.)		**Week Due**	**Proportion Assessment**
1	First Class Test		6-7	
2	Second Class Test		13-14	
3	Final exam		16-17	
4	Laboratory	Lab. Reports	Weekly	
5		In Lab. Evaluation	Weekly	
6		Final Practical Exam	15	
7	Quizzes		≈ Weekly	
8	Homework		≈ Weekly	
9	Exercises		One /2 Weeks	
10	Seminar		1/month	
11	Training Project*		1-15	
	Total			100%

- *The training field project in hospital is an independent assessment, the grade point is 100.*

Table.4: The schedule of course evaluation (GPA).

Mark	Grade	Symbol	Value
95 – 100	**Excellent^{+}**	**A^{+}**	**4**
90 to < 95	**Excellent**	**A**	**3.75**
85 to < 90	**Very Good^{+}**	**B^{+}**	**3.5**
80 to < 85	**Very Good**	**B**	**3.0**
75 to < 80	**Good^{+}**	**C^{+}**	**2.5**
70 to < 75	**Good**	**C**	**2.0**
65 to < 70	**Pass^{+}**	**D^{+}**	**1.5**
60 to < 65	**Pass**	**D**	**1.0**
< 60	**Failure**	**F**	**0.0**

The grade of the project is scaled at 0-100. Both departmental supervisors and hospital examiners are responsible to evaluate the written project and the seminar presentation to give the final project mark. All examiners of the project must have M.Sc. at least.

The medical field training project consists of a 15-week hospital-based rotation in: Diagnostic Imaging (x-rays, CT, fluoroscopy, and Diagnostic Ultrasound), MRI, Nuclear Medicine, Radiation Therapy, Mammography, Radiation Protection, and Health Physics. The student will spend three months (Last-Term of his final year) in Specialist Hospitals where they can gain an experience in different departments related to Medical Physics within the hospital in the field of Nuclear Medicine, Radiotherapy, Medical Imaging and medical imaging and radiation protection. After re-arranging the student groups to do their training in the hospital upon their requests. Official letters will be sent to hospitals to get the acceptances for the hospital training. The Supervisor of each group (male/female) will make periodic Visits, To follow up the students Progresses, with cooperation Department Staff Supervisors. By the end of the training program (last week) the students (male/female) should have to write a report Assay with short oral presentation about experiences they gained and what kind of difficulties they faced. Finally Marks will be given according to the Evaluation Report form the Hospitals and students easements with the oral presentation they give.

Indirect Assessment

The indirect of assessment is dependent mainly on the feedback from surveys such as program, course, student satisfaction of the examination, alumni, and stakeholder surveys, focus group, graduate interviews or any other assessment techniques to evaluate the quality of the learning process. Indirect assessment provides a good assessment indicators to improve the quality of the program.

Program Assessment

Concept

The program assessment is designed to measure the performance of student learning outcomes. Curriculum Development and Assessment Committee members are responsible about:

- Ensure that the basic statements of what students should learn.
- Verifying the design of the program met its learning.
- Gathering the data of assessment indicators to ensure the performance of the learning outcomes.
- Analyze student learning data to improve and develop learning.

Objectives of Program Assessment

The main objectives of program assessment include updating the study plan courses, strategies, improving the courses and student services, measuring the program effectiveness through the feedback data from the further studies of graduates and stakeholders, satisfying of the College resources and comparable benchmarks and accrediting the program teaching and learning process and provided resources and services.

The PLO evaluation includes three levels of evaluation, including, Program (Cohort) Level, Course level and Student level

Program level Evaluation:

The PLO evaluation against the whole program is done using multiple types of direct and indirect assessment data, including Course PLO assessment, Final year project assessment, Internship Feedback and Exit Survey of graduating students. These data modules are discussed in the subsequent sections. The Program level evaluation process, including assessment activity, assessment data, and KPIs.

Course Evaluation:
The course evaluation is done based on the percentage achievement of each targeted PLO in the course. A student is considered to have attained the PLO in the course if he gets >60% marks against that PLO. For a course, a PLO is considered to be achieved if the PLO attainment percentage of the students >60% and the average for all students in that course against the PLO is >60%.

Student Evaluation:
The PLOs Evaluation process for individual students includes both direct and indirect assessments taken throughout all the semesters. The direct assessments include assessment Course PLOs attainment and assessment of the Graduation Project. The indirect assessment includes an exit survey of graduating students and Internship feedback of individual students.
Developing and assessing students learning outcomes bases on three QA stages

D. Student Admission and Support:

1. Student Admission Requirements

First: BA Program

The bachelor's degree is awarded to graduates of secondary schools in the various fields of scientific and theoretical specialties, which have been built according to a highly academic and professional academic plan. It is necessary for students to complete all the study modules allocated for each plan.

Admission to the BA Program:

1. The admissions system at Umm Al-Qura University is made once before the beginning of the academic year directly after the secondary school results are published, according to the period specified and announced on the website.
2. Apply via the Unified Admission Portal at Umm Al-Qura University website.
3. Preference is given to applicants who meet the stated conditions and standards and according to the capacity of the colleges of the university.
4. Passing personal interviews and admission tests for the departments that require this.
5. Confirmation of admission of students after the announcement of admission results.
6. The university number will be issued after the admission has been confirmed.

Admission Requirements of the BA Program:

1. The applicant should be a Saudi citizen or born to a Saudi mother (non-Saudis may apply for scholarship programs).
2. The applicant must be holding a secondary school certificate (or an equivalent) from the Saudi Kingdom or abroad.
3. The secondary school certificate or its equivalent must be a recent one (not exceeding 5 years). For the Colleges of Medicine, Pharmacy, and Health Sciences, the secondary school certificate should not be more than 2 years old.
4. The student must pass the required admission tests (General Aptitude Test [GAT] and the Summative Assessment), organized by the National Center for Assessment, if required by the desired department.
5. The student must pass any other exam or interview required by the college (recitations, judicial studies, physical education, art education, Shari`ah, etc.)
6. The applicant must have not been dismissed from the UQU University or any other university for disciplinary reasons.

2. Guidance and Orientation Programs for New Students

The Student Guidance and Support Unit are affiliated to the Vice Presidency for Educational Affairs at UQU. It is responsible for providing services to students, advising and guiding them, and offering counseling in order to fulfill the deanship's objectives.

Objectives:

- Prepare new students and provide the necessary support for them to overcome whatever difficulties they may encounter.
- Provide academic orientation and guidance for students.
- Prepare students psychologically and socially to enable them to achieve compatibility with university life.
- Foster students' capabilities and enhance their academic skills.
- Nurture students' interactive skills such as communication skills, personal planning, and professional interaction.
- Discover talented students and provide them with the appropriate care and attention.
- Highlight the contributions of gifted and talented students locally and internationally.

Functions:

- Supporting academic e-guidance, and facilitating the way College members approach the program.
- Developing an academic advisory plan for the deanship and supervising its implementation.
- Identifying the mechanisms of academic guidance for College members, and delineating the academic advisor's responsibilities to eliminate the recurrence of academic problems.
- Helping newcomer students adapt to the university environment quickly and smoothly.
- Acquainting students with the deanship's objectives, mission, educational programs, and streams.
- Raising awareness of the importance of the unit among students and how they can benefit from its services through meetings, newsletters, and the deanship's website.
- Offering guidance and counseling to students on their academic path, and examining and addressing relevant problems.
- Following up on the academic performance of all students on a constant basis through course coordinators and department heads, and inspecting cases of academic faltering.
- Studying and addressing cases of academic faltering, approaching them individually, and referring them to the party concerned with coordination with the relevant authorities.
- Studying the psychological and social conditions of students who need follow up, and providing the necessary help for them to solve their problems.
- Holding seminars and courses necessary for improving and fostering students' academic skills.
- Encouraging the behavior of distinctive students by underlining the names of distinguished students on the Roll of Honor, and honoring them on different occasions.
- Promoting the concept of positivity among students, and encouraging them to excel in the academic and personal levels.
- Providing College members with the latest updates in their academic field.

3. Student Counseling Services

(academic, career, psychological and social)

Academic

1. An academic supervisor is determined for each group of students to supervise the registration and follow-up of educational attainment and the problems and difficulties faced by students in the

educational process, as well as follow-up of students defaulting.

2. General guidance, such as guidance and advice in the selection of subjects and career planning.

3. Communication with the supervisor in the department if there are problems or difficulties in the educational process.

4. Determination of office hours for College members.

5. Complaining box for students, and head/coordinator deals with received complaints in secret.

6. Questionnaires are designed for students regarding courses and College members after each semester.

7. Consultations between individual students and professors during office hours scheduled.

8. Description of mechanisms taken by the program to make sure that these arrangements for the guidance of academic progress are effective and useful to students.

9. Develop a guiding program for new students.

10. Questionnaires for students on satisfaction of the counseling and guidance department in the department.

Table.1: Academic Guidance Methods.

1	**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.
2	**Tutoring coordinator**	Coordinates and develops the university's peer tutoring together with faculties, student services and the student union.
3	**Student adviser**	Student advisers are LUT 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.
4	**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.
5	**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 Umm Al-Qura University, e.g. through the flexible right to study) and provides guidance in administrative issues related to graduation.
6	**Head of degree Program (HOD)**	Is in charge of evaluating and developing study guidance. Grants acceptance of courses not offered by the university.
7	**Head of study affairs**	Is responsible for organizing study guidance in the College. Is responsible for administration of studies and partly also for study guidance related to administrative affairs.

8	**Teacher/tutor**	Helps students prepare their individual study plan and follow its progress. Teacher/tutors provides guidance in the selection of compulsory. They are studying guidance personnel appointed for a department or degree program. Students may turn to them with any issues involving studies.
9	**Teachers**	Are responsible for study guidance related to the completion of the courses/modules they are responsible for.
10	**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.
11	**Professors**	Provide guidance in the selection of a research topic, and in preparing final theses for postgraduate studies.
12	**Career Services**	Guides students in career planning and searching for employment.
13	**Library**	Provides guidance in information retrieval and instruction in information literacy.
14	**Origin helpdesk**	Support services for the use of information and communication technology in studies.

The Deanship of Student Affairs comprises of several units as follows:

- Student Fund
- Student Guidance Center Unit (Females Section)
- Traffic and Transportation
- Cultural Activities Department
- Sport Activities Department
- People With Special Needs Unit
- StudentsTraining Unit
- Rewards department
- Scholarships Department
- Special Care Unit
- Student discipline and protection department
- Feeding department
- Student Housing
- Student Mentor Center
- Unit of Excellence

Center Units:

Psychological Guidance Unit:

Objective:

To provide specialist psychological and mental guidance services through direct guidance to students, offered by psychologists and social workers in fixed times to reach final solutions that suit student's personality, abilities and circumstances**.**

1. **Social Guidance Unit**

Objective:

To provide programs and counseling to help students achieve social compatibility by sticking to the ethics and

standards of the Muslim community and learning skills of successfully dealing with others in and out campus.

Student Guidance Center Unit at UQU provides the psychological, social and educational counseling, besides designing the guidance programs, assisting the student to discover oneself, benefit from his own capacities to solve his problems and achieve his objectives.

The center also attaches attention to the mental health, self and study compatibility of the students, all this takes place within the context of the Islamic teachings.

Services:

- Providing various information sources, including educational CDs, illustrative tools, booklets and brochures pertaining to counseling and guidance services relating to the unit.
- Providing guidance services to help students achieve academic excellence, besides supporting and boosting academic and social capabilities of UQU students.
- Providing personal and specialist guidance services for the student suffering from mental or social problems via the direct guidance between the students and the psychologist or the social specialist.
- Providing group guidance service for a number of students having the same problem.
- Simplifying integration of students with special abilities by adopting principles of personal independence and social equality.
- Supporting talented students and providing them with the incentives to work in their communities by setting up their educational programs and mechanisms and following up its implementation, assessment and development.

4. Support for Special Need Students

(low achievers, disabled, gifted and talented)

Low Achieving and disabled Students

The **Vice Deanship of Counseling, Guidance and Community Partnership** at UQU has a Special Care Unit that supports students with special needs as follows:

The Special Care unit is concerned with providing a number of services for students with special needs, including;

- Issuing licenses to enter their cars into campus.
- Allocating seats for them in the student transportation vehicles.
- Providing special lavatories for them at all health facilities of the university.
- Providing special seats and tables for them in the classrooms.
- Allocating special seating areas for them at colleges, with all requirements such as seats, tables and drinking water.
- Giving special attention to their study schedules and ensuring classrooms are close to them.
- Getting them familiar with student clubs, activity venues, and equipping those places with whatever suits their special needs.
- Inviting them to student meetings and getting their feedback on the quality of services provided
- Contacting centers and companies concerned with providing services for people with special needs in order to cover all educational requirements of special needs devices, technologies, books, audiovisual materials, etc.
- Relieving them from all fees of student services, shops rented inside campus, and making an agreement with the traders and investors in this regard.

- Inviting them to participate in the summer centers organized by the university.
- Helping them get jobs during Hajj season with the companies working on Hajj season and Tawafa organizations.
- Giving them the priority in the student employment programs.

The UQU supports the gifted and talented student throughout the Vice Dean of Counseling, Guidance and Community Partnership, that has an objectives which are:

- Achieving academic compatibility and what it entails of scientific success.
- Increasing the level of educational achievement, overcoming academic problems, and preparing the students professionally.
- Paying attention to talented students, developing their potential talents, upgrading their skills, and creating a suitable environment to develop and display their skills in the community.
- Caring for students with special needs, and facilitating the process of integrating them into the community.
- Achieving the principle of social equality and students' self-independence, in addition to studying students' problems.

Departments of the Vice-Deanship for Counseling, Guidance and Community Partnership:

- Counseling and Guidance Department
- Student Guidance Center, including the following units:
    - Psychological Guidance Unit
    - Social Guidance Unit
    - Academic Guidance Unit (educational) :
        - Talent Section.
        - Students with Special Abilities Section.

Academic, Educational Guidance Unit

Objective:

To achieve academic compliance and scientific success, as well as increasing levels of academic achievement, overcoming academic problems and preparing students professionally for a successful future career.

1. **Special Care Unit:**

- Talented Students Section:

Objective:

- To give talented students the required care and attention, develop his capacities, hone his skills, and create a proper atmosphere for him to develop his talent and get recognition within the university community.

- Section of Students with Special Abilities:

Objective:

To give the student with special abilities the needed care and support, and ease their integration into the university community by adopting principles of personal independence and social equality, besides studying their problems and solving them.

E. Teaching and Administrative Staff

1. Needed Teaching and Administrative Staff

Academic Rank	Specialty		Special Requirements / Skills (if any)	Required Numbers		
	General	Specific		M	F	T
Professors	Dawah (M=3&F=2) Islamic Culture (M=2&F=3)	Medical Physics (M=3&F=0) Theoretical Nuclear Physics (M=1&F=0) Solid state (M=1&F=0) Photonics (M=1&F=0)		11	5	16
Associate Professors	Dawah (M=1&F=2) Islamic Culture (M=2&F=1) Biology (M=3&F=1) Chemistry (M=1&F=1) Mathematics (M=2&F=0)	Medical Biophysics (M=1&F=0) Solid state (M=3&F=1)		13	6	19
Assistant Professors	Dawah (M=1&F=1) Islamic Culture (M=1&F=1) Biology (M=0&F=2) Mathematics (M=0&F=2) English Language (M=2&F=2)	Medical Physics (M=2&F=3) Solid state (M=3&F=7)		9	18	27
Lecturers	-	-		-	-	-
Teaching Assistants	-	Medical Physics (M=1&F=0) Solid state (M=0&F=1)		1	1	2
Technicians and Laboratory	8	6	-	7	7	14

Academic Rank	Specialty		Special Requirements / Skills (if any)	Required Numbers		
	General	Specific		M	F	T
Assistants						
Administrative and Supportive Staff	4	-	Secretary works	1	3	4
Others (specify)	-	-	-	-	-	-

2. Professional Development

2.1 Orientation of New Teaching Staff

Describe briefly the process used for orientation of new, visiting and part-time teaching staff

2.2 Professional Development for Teaching Staff

Describe briefly the plan and arrangements for academic and professional development of teaching staff (e.g., teaching & learning strategies, learning outcomes assessment, professional development, etc.)

The Academic and Administrative Training Unit reports to the Vice-Dean for Academic and Administrative Training. Its responsibility is to develop the capabilities of the College members in areas of quality, accreditation, measurement, assessment, strategic planning and management of training activities.

Responsibilities:

- Develop capabilities of the College members and administrative leaders in areas of effective self-development.
- Encourage the College members and administrative leaders to embrace effective self-development.
- Manage training activities by determining training requirements and planning, following up and assessing training activities.
- Qualify and prepare new College members and administrative staff.
- Develop capabilities and optimize potentials of leaders in academic and administrative units to raise their efficiency and competence.
- Set annual executive plan of the unit in coordination with the Strategic Planning Unit and submit such plan to the Deanship for approval.
- Implement the Unit's annual executive plan upon getting the Deanship's approval for it

https://uqu.edu.sa/en/quality/139

https://uqu.edu.sa/en/quality/60027

Umm Al-Qura University offers a lot of workshops to develop and improve the abilities of staff in the field of teaching and research.

https://uqu.edu.sa/quality https://uqu.edu.sa/elearn,

Also the Deanship of Scientific Research offers some workshops to develop the research activity of the staff and the announcement of them at the university are available at the website (https://uqu.edu.sa/en/dsr) announce some workshops for the scientific research.

The teaching staff has the opportunity to attend any workshop. Some certificates of attendance of such workshops are attached. Therefore, the university ensures that the teaching staff has the appropriate qualifications and experiences for teaching the courses that they teach.

All the members' teaching staff are working a full-time, with good moral character, good reputation, scientific and practical efficiency and working with the spirit of teamwork. All the members teaching staff are involved on a continuing basis in scholarly activities that ensure they remain up to date with the latest developments in their field and can involve their students in learning that incorporates those developments. The academic staff in the department have a high degree of professionalism, experience and highly skilled in the general and specific areas of specialization. Most of the staff' members participate in research activities in the field of study, they teach and also involve their students in these activities. Furthermore, the university encourages all the College academic staff members to be promoted by carrying out remarkable researches.

F. Learning Resources, Facilities, and Equipment

1. Learning Resources.

A mechanism for providing and quality assurance of learning resources (textbooks, references and other resource materials, including electronic and web-based resources, etc.)

1a. What processes are followed by College and teaching staff for planning and acquisition of textbooks, reference and other resource material including electronic and web based resources?

1. Teaching staff specifies their needs of different resource according to the study plan.
2. The needs should be approved by the program council.
3. Certified report should be sent to the College management

1b. What processes are followed by College and teaching staff for planning and acquisition resources for libraries, laboratories, and classrooms?

• College and staff members generally follow the procedures to acquire resources, which typically start by submitting their requests in appropriate forms through their department heads.

2. What processes are followed by College and teaching staff for evaluating the adequacy of textbooks, reference and other resource provisions?

• Instructor recommends changing the textbook or adding a reference book in the course report at the end of the semester.

3. What processes are followed by students in evaluating the adequacy of textbooks, reference and other resource provisions?

• Student Feedback Surveys at the end of the semester are used for evaluating the adequacy of textbooks, references and other resources.

4. What processes are followed for textbook acquisition and approval?

1. The required textbooks determined by College member.
2. Textbooks list prepared by the head department.
3. College dean approves the list.
4. The approved list, then sent to the academic affairs at the university.

The UQU Deanship of E-Learning and Distance Education was established with the objective of providing services for students and teaching staff, and improving university Learning outcomes within a framework that accomplishes the university strategic objectives.

E-learning is a technology-based mode of learning that utilizes modern communication technologies such as computers, networks, and multimedia (audio, video, graphics, etc), in addition to search tools, e-libraries and portals (whether in class or distantly). E-Learning enables live interaction between the student, the instructor, and the course being studied in a proper and convenient educational environment that overcomes the limitation of time and space. It is also deemed to be a perfect solution for education seekers who don't have time to enroll in the conventional academic programs. Through e-learning, furthermore, academics from the world's top universities would be able to provide e-courses. And compared to conventional learning, e-learning can cover a far larger segment of education seekers.

Through its Deanship of E-Learning and Distance Education, UQU sets its sights on providing e-learning services based on integrated IT infrastructure and learning environment. It also seeks to support the teaching staff to develop e-courses and learning units by making use of the modern e-learning methods and techniques, as well as academic accreditation. Besides, it helps reduce the time necessary for developing the programs and providing integrated services and solutions in this field. Other objectives include: ensuring access to the content through the educational store, setting a mechanism to develop the content of the E-courses, encouraging teamwork in developing the programs, and assuring quality through the continuous evaluation and updating of the e-courses.

2. Facilities and Equipment

(Library, laboratories, medical facilities, classrooms, etc.).

The institutional environment (facilities, equipments, and infrastructure) at the department of physics, College of Applied Science includes sufficient space and the technology which allows the department to deliver effective and efficient learning process. The instructional methods and approaches in a conducive learning environment will be more effective by a good use of these facilities and equipment that enable students to take responsibility for their own learning.

The use of these facilities and equipments are assessed regularly in terms of their suitability for all stakeholders, i.e. students, College and staff. In the physics department, there are routine maintenance for the laboratories and the equipments. In all classrooms and laboratories, there are an effective technical tools such as Data show. Table.2 shows the distribution of the classrooms and the laboratories in male and female campus.

Table 2: The classrooms and laboratories in the physics department.

Item	Male campus (Al-Abdia)	Female campus (Al-Zahir)
Laboratories for undergraduate students	**13** (100 square meter)	**7**
Classrooms	**4** (Accommodate 100 students)	**5**
Simulation Room	**1** (Include 29 PC)	**-**
Research Laboratories	**5**	**-**

Note: The female student and female staff will move to a new building in the near future. The building is under construction now. There will be around more than 35 laboratories and classrooms for the physics department in the new building.

Information Technology

The main goal of the deanship of the information technology is to provide the support systems for smart and advance research, provide the Integrated and Effective Educational Systems, and provide the Comprehensive Financial and Administrative e-Services. Therefore, they are willing to enable information resources and tools to be made accessible and well integrated to facilitate the processes of Education, learning and teaching, Research, and Management for all stakeholders. From the other hand, the deanship of E-learning offers a continuous workshop to enable the staff and the students to use these facilities to enhance the teaching process.

The E. Learning announcement about workshops are available on the university at the website (https://uqu.edu.sa/en/App/Events/2264).

Library

Library, King Abdullah bin Abdul Aziz at Umm Al-Qura University is an institution of scientific, cultural, educational, social. The aim to collect information sources and development of different ways (buying and gifting, exchange and deposit), organize, and retrieve the shortest time possible, and submitted to the community of beneficiaries on their differences through a range of traditional services, as services loan, references and periodicals, photography and modern services as services take ongoing, and broadcast selective information, and other services calculated by means of qualified manpower scientifically and artistically and technically in the field of library and information science

3. Arrangements to Maintain a Healthy and Safe Environment (According to the nature of the program)

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 themselves 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.

G. Program Management and Regulations

1. Program Management

1.1 Program Structure

(including boards, councils, units, committees, etc.)

Umm Al-Qura University has been keen to achieve all-inclusive quality in all its institutions, faculties and academic departments in order to keep place with the contemporary developments and to meet the requirements for the Kingdom's growth and the job market. This triggered a series of efforts aimed to establish a body that should be responsible for quality and accreditation in the University. As a result, the Deanship of University's Development and Quality Assurance was established, taking into account the development of a structure with designations and responsibilities dealing with development and quality.

In 1429 AH, the Deanship of Academic Development and Quality Assurance was established, which is on its way to achieve total quality management system at UQU. The Deanship aims to establish a Total Quality Management (TQM) system and processes that guarantee its development and improvement in the academic, administrative, and research organizations in order to enhance the performance of human and learning outcomes at Umm Al-Qura University. This would further improve outcomes and services in academic and scientific research as well as community services; thereby improving overall performance required for getting national and international accreditation. It also focuses on the University's leadership, its Islamic identity and its international ranking. The University's strategic plan which embodies its mission in seven main issues, comprises a number of measures and programs with a time frame attached to their implementation. It is considered to achieve overall quality standards and improve performance. Getting accreditation is one of the main seven priorities, and the senior management of the University grants its top position for its implementation. The University has strived to meet the requirements for institutional and program accreditation both at national and international levels. In its quest to meet the requirements for program accreditation with a national organization, the University, represented by the Deanship of Academic Development and Quality.

Assurance, has signed a contract with the National Commission for Academic Accreditation and Assessment (NCAAA) in order to raise the quality level of PLOs of programs at the University in all its operations and outcomes. The physics program was one of the programs have been selected

for national accreditation. This is an opportunity to the physics staff members to gain experience in relation to preparing themselves for conducting self-study and meeting the NCAAA system requirements for quality assurance and achieving academic accreditation. To develop a set of practical procedures, measures and administrative arrangements for conducting the process of self-evaluation of the physics program, several committees were created in order to support the development of a quality assurance system and deployed at the department and College levels including:

1- Curriculum Committee.

2- Laboratories Committee.

3- Schedule Committee.

4- Academic Advising Committee.

5- Student Activities Committee.

6- Appeal and Complaints Committee.

7- Postgraduate Studies Committee.

8- Scientific research Committee.

9- Quality Assurance & Academic accreditation Committee 10- Measurement and Evaluation Committee.

11- Employment Committee.

13- Alumni and scholarships Committee.

14- Occupational Health & Safety Committee.

1.2 Stakeholders Involvement

Describe the representation and involvement of stakeholders in the program planning and development. (students, professional bodies, scientific societies, alumni, employers, etc.)

The university has identified as an institution for training profile and study of courses in official learning, therefore the university can be used continuously for evaluation and further development of the learning outcomes. The Quality of the most important goals of the university's strategy is the education provided by the university (undergraduate student, and master program), research, and support services. The Quality of the teacher guide explains the university's policies on quality as well as the goals and practices relating to the evaluation and measurement of the various activities and the development of the university.

To manage and develop quality assurance, it must apply:

1. Submission of documents and then evaluated it and evidence of quality assurance and development.
2. Submission of the report to assess the standard requirements.

Control in Learning and Teaching.

The University continuously uses a control system for teaching and learning. This ensures taking into description the standards for the accreditation of study programs. The Learning objectives include disciplinary and interdisciplinary aspects, in particular scientific or artistic talent, the ability to enter skilled employment, the qualification for social engagement and personal development.

A Quality management committee established by the College of Applied Science, Physics Department receives information from the university to continuously improve their programs. The Quality management system described in the quality of the teacher in the university, such as support services includes documents of quality management at the university and other related materials available on [from NCAAA and the internal network of the Umm Al Qura University].

We've been checking on the quality assurance process through:

(1) Questionnaires at the level of staff members of physics department.

(2) Questionnaires to students of physics department.

(3) A copy of the distribution all Standards of self-evaluation of all staff members.

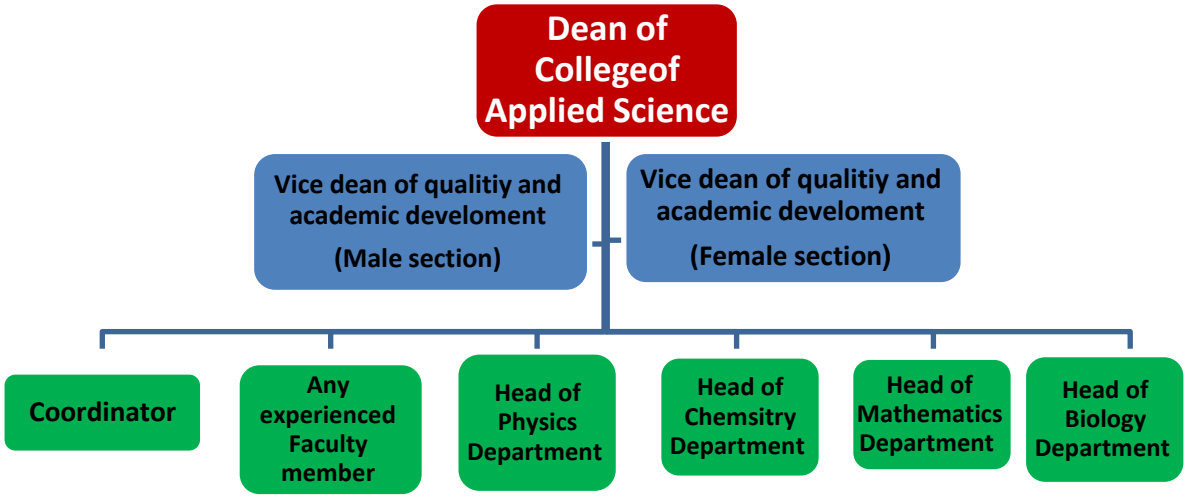
(4) A copy of meetings of the Committee for accreditation and quality.

(5) Department plan was developed and the old plan 1419 H, (1433 H) and the new study plan 1437.

To evaluate the quality of program implementation, quality committee should give a brief report points of a certain strength, and areas we need to develop, and priorities in implementing. All staff members of the department physics involved in the self-evaluation processes, and cooperate in reporting and performance improvement processes. Developing and updating courses in the physics department to meet international standards and requirements of the market and also, prepare graduates student (Master) with high creative skills in various areas of the medical physics branch.

Quality assurance processes in institutions should involve not only the educational programs, but also other matters such as the facilities and equipment, staffing, relationships with the communities served by the institution and the administrative processes that link all these together. This means that a quality assurance system should involve individuals and academic and organizational units throughout an institution, not only those directly involved in the delivery of educational programs.

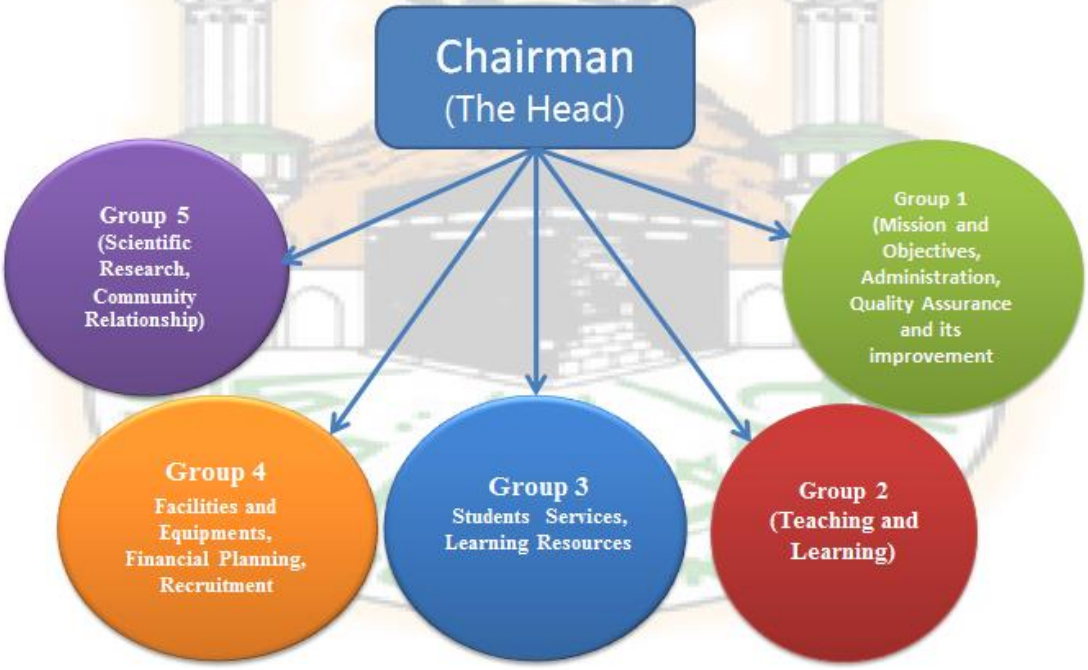
Within each of these internal units consideration should be given to their inputs, processes and outcomes, with an emphasis on the quality of the outcomes of the services they provide. In the past considerations of quality were largely based on inputs such as the qualifications of College, provision of equipment and facilities and adequacy of resources. However, while these are still important. The most important consideration is the quality of outcomes, although inputs and the processes used are still significant and standards relating to them must be maintained. The quality assurance and academic accreditation committee of the College of Applied Science as follows in the following sketch.



The key aim in the quality management and development is to incorporate quality management 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 Committee (QMC) established and developed by the department of physics in continuously university's mission of improving of its programs.

Proposed Structure for Committee for Quality Assurance and Academic Accreditation at the Department



To manage and develop quality assurance, the College 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 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 researched and broader contributions to the community.

- A wide range of other activities that provide supporting infrastructure must also be evaluated and progressively improved. 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 the College should be given responsibility for leading the quality assurance processes, and a committee 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 the 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 three 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 QMC 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 quality 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.

Alumni:

An Alumni Committee was established and tasked with keeping ties with Alumni through social Medias. The Alumni committee has been communicating with alumni through, a meeting for

alumni, and social media; twitter, Facebook, and Instagram (https://uqu.edu.sa/page/ar/93234461)

Also, the alumni committee writes an annual report about alumni including their databases, information about their careers, and all other statistical data are available and published via this report on the department website:
https://uqu.edu.sa/page/ar/93234454

Alumni survey is done at an interval of two years. The survey has other purposes, but one of the objectives is to obtain the opinion of the alumni about how they found themselves in the abilities relevant to the PLOs at the time of graduation.

2. Program Regulations

Provide a list of related program regulations, including their link to online version: admission, study and exams, recruitment, appeals and complaint regulations, etc.)

https://drive.uqu.edu.sa/_/studaff/files/qanon.pdf

https://drive.uqu.edu.sa/_/studaff/files/%D9%83%D8%AA%D9%8A%D8%A8%20%D8%AF%D9%84%D9%8A%D9%84%20%D8%A7%D9%84%D8%B7%D8%A7%D9%84%D8%A8%20%D8%A8%D8%AC%D8%A7%D9%85%D8%B9%D8%A9%20%D8%A7%D9%94%D9%85%20%D8%A7%D9%84%D9%82%D8%B1%D9%89.pdf

H. Program Quality Assurance

1. Program Quality Assurance System

Provide an online link to quality assurance manual

https://drive.uqu.edu.sa/_/quality/files/Policies/quality%20manual%201.pdf

2. Program Quality Monitoring Procedures

Monitoring

College of Applied Science policy has a systematic monitoring according to the relevant rules of the University for both the staff and students to ensure equality in opportunities

Positive action

According to systematic monitoring procedure of College of Applied Science. In case of any inequalities, several positive action will be taken with regard the discipline the imbalance, including such measures as:

1. Introducing assertiveness training.
2. Encourage all technical laboratory staff members to take more training to improve their skills continuously.
3. Introducing English language training
4- Encourage the medical physics student program to improve their language skills by taking

several language workshops.

The following is a brief description of the process used in assessing and evaluating Medical Physics Program PLOs

- **Direct assessment**
  - Assessment tools:
    - The actual attainment levels of students in a course through exams, quizzes and assignments.
  - Evaluation method:
    - Define Levels of attainment of PLOs for evaluating student's direct assessment results.
    - Tabulate and Display PLOs Achievement based on student's direct assessment results
    - Comment on PLOs assessment
- **Indirect assessment**
  - Assessment tools:
    - Course survey
  - Evaluation method:
    - Define Levels of Attainment of PLOs for evaluating indirect assessment survey.
    - Tabulate and Display PLOs Achievement based on Indirect Surveys
    - Comment on PLOs assessment

Analysis and interpretation of the assessment results:

The attainment of learning outcomes is usually judged primarily by using the percentage of students achieving a predefined set of attainment levels and should not be judged by using the average score of all students in a specific outcome. The average score can be used as additional and informative only.

The analysis of the assessment results must be oriented towards:

- Identifying the reasons, issues, and root cause behind the non-attainment of a specific outcome.

Determining actions to be taken in the following semester to resolve these issues.

KPI's and Benchmarking:

The physics department has embarked upon constituting assessment committee to develop a set of practical procedures, measures and administrative arrangements for conducting the process of identifying pattern and key performance indicators (KPIs) in various fields of activities and defining major tasks at the department level and configuring them for use in further improvement. Also, conducting benchmarking for indicators met with the leading national and international universities. Work is underway to provide reference benchmarks by which to compare the levels of performance and quality of the medical physics program with those of the national and international universities. The following tools, scales and documents have been used to measure the KPIs:

Analysis of the following surveys:

1. Course Evaluation Survey (CES).
2. Program Evaluation Survey (PES).
3. Student Experience Survey (SES).
4. The opinions of College, researchers and graduate students in scientific research institutes at the University.
5. Evaluating the academic program by College members' survey.

6. Evaluating College members for learning resources available to the program.
7. Assessing the quality of services and student activities.
8. The program's vision, mission and objectives (College members).
9. The program's vision, mission and objectives (students).
10. The opinion of graduates after graduation at least six months in the quality of the program.
11. Opinion recruiters in College graduates.
12. Measuring satisfaction teaching facilities and equipment for staff members
13. Measuring the satisfaction of senior management for facilities and equipment
14. Measuring student satisfaction for facilities and equipment
15. The extent of job satisfaction for employees
16. Student opinions about registration and Academic Advising services.
17. These surveys are available online at the link:

https://uqu.edu.sa/applied-sciences/ar/93235019

- Collecting quantitative data and statistics related to key performance indicators were obtained through the Deanship of Information Technology, Deanship of College and Staff Affairs, Deanship of Admissions and Registration.

3. Arrangements to Monitor Quality of Courses Taught by other Departments.

Not applicable

4. Arrangements Used to Ensure the Consistency between Main Campus and Branches (including male and female sections)

The UQU confirms the arrangement of the teaching of the program conducted for both Abdia and Al-Zaher campus with the same standards for classrooms, laboratories, library, and other supported infrastructure.

5. Arrangements to Apply the Institutional Regulations Governing the Educational and Research Partnerships (if any).

Not applicable

6. Assessment Plan for Program Learning Outcomes (PLOs), and Mechanisms of Using its Results in the Development Processes

Assessment of Program Learning Outcomes (PLOs):

To ensure that graduates of the Physics Program satisfy the Program Learning Outcomes (PLOs), the curriculum must ensure achievement of each unique PLOs. The Table shows the coverage for each PLOs as it relates to each course in the Physics program is included in the section……...

In fact, the link and impact of Program educational objectives (PEOs) on program learning outcomes is studied to make sure that PLOs adopted serve all PEOs; if not, additional PLOs can be added or integrated with the list established based on ASIIN requirements. The attainment of PLOs is conducted using different means, including course assessment (direct and indirect). The assessment of PLOs leads to a list of improvement actions; these actions are implemented during the following semester (s). The assessment of PLOs can lead to changes in the curriculum. If this is the case, the curriculum is updated with the required changes. The assessment process of PLOs continues to evaluate the efficiency of the changes made.

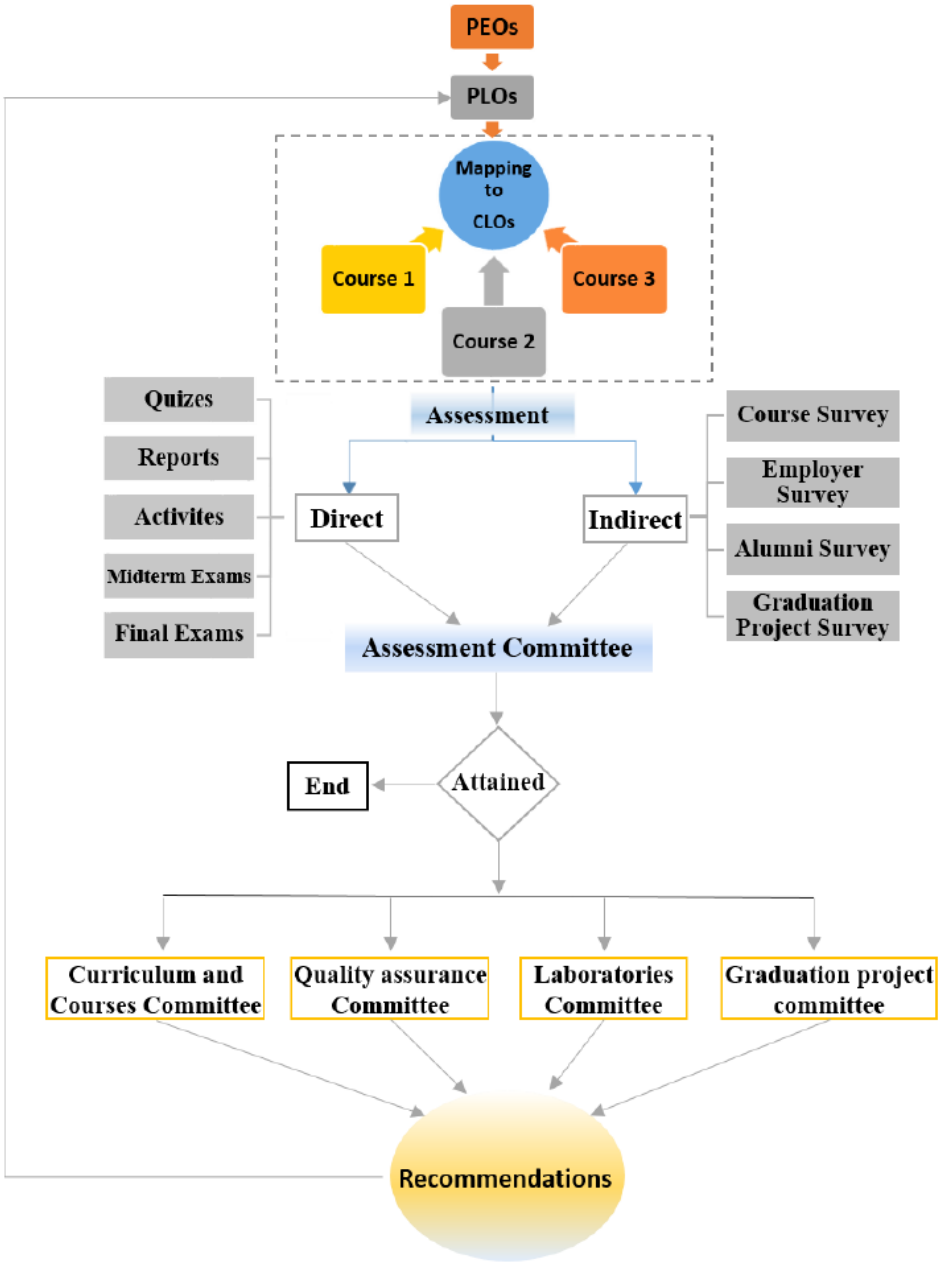


Figure 5: the process of assessing and revising the PLOs

Continuous development is something very significant in the Physics Program. For the last five years, there have been continuous developments on various fronts, including the curriculum, the assessment processes, academic advisement, facilities, graduation project quality and assessment, etc. The whole process of development itself is being improved to obtain a highly sustainable system of assessment, evaluation and improvement. The processes used for evaluating the program learning Outcomes were described in Section G.1

We should also mention that modifications in the curriculum have been made, following is a list of improvement plans based upon the recent evaluations:

1. An updated plan 33 has been running since 2012. The newly admitted students for undergraduate study has to go through a one year Pre University Qualifying Year Program where students takes English, Communication Skills, IT, Mathematics and courses related to the Physics program. According to UQU, the Pre University Program is part of the physics program.
2. A new curriculum (plan 37) has been started during 2016-2017 academic year. Plan 37 does not require the newly admitted students for undergraduate study, to go through a one year Pre Universrity Qualifying Year Program.
3. Graduation Project processes and assessments are being improved gradually. Assessment processes have already been implemented. Further enhancements in processes have been proposed and will be presented to the department council at the beginning of the next academic year.
4. From the evaluations and discussion, it appears that some students in several courses need tutorials. Therefore, the Department will start offering tutorial sessions to selected courses. More courses will be added where tutorial sessions will be offered for students to enhance their learning.

5. At present, the female section of Physics department is using a temporary location at Al-Zaher girl campus. A new building for the female section of College of Applied Sciences Systems has been constructed. Before moving to this new building, the department is ensuring that it fulfills all the requirements of Physics education, such as safety, spacious classrooms and state of the art laboratories.

7. Program Evaluation Matrix

Evaluation Areas/Aspects	Evaluation Sources/References	Evaluation Methods	Evaluation Time
Program **Learning outcomes**	• Student • Graduates,	**Direct assessment methods** are those where a conclusion can be reached directly from student submitted work, such as measurement of Program Learning Outcomes (PLOs) through: • Homework, • Quizzes, • Exams (Class Test, Final) • Oral Class Discussion, • Reports • Assay, • Research Project. Where methods used and conclusions reached are easily interpreted and evaluated.	• Throughout the courses teaching. • Beginning of semesters. • End of academic year.
	• Student • Alumni, • College and program leaders, • Administrative staff, • Employers, • Independent reviewers (e.g. ASIIN and NCAAA	**Indirect assessment methods** are those where a conclusion is drawn inferentially from evidence observed, such as: • Alumni survey, • Employer survey, • Exit survey, …….etc. Report feedback from the internal/and external	• End of the semesters. • End of the academic year. • Exit point of the graduates. • After six months

Evaluation Areas/Aspects	Evaluation Sources/References	Evaluation Methods	Evaluation Time
	reviewers)	reviewers	from graduation.
Program level Evaluation	• Student • Alumni, • College and program leaders, • Administrative staff, • Employers, • Independent reviewers (e.g. ASIIN and NCAAA reviewers)	The PLO evaluation against the whole program is done using **indirect assessment** data, including: • Course Learning outcomes (CLOs) assessment, • Course analysis report. • Self-study assessment as recommended by NCAAA. • Final year hospital training assessment, • Internship Feedback and • Exit Survey of graduating students.	• End of the semesters. • End of the academic year. • Exit point of the graduates. • After six months from graduation.
Course level Evaluation	• Student • Graduates, • Administrative staff, • Independent reviewers (e.g. ASIIN and NCAAA reviewers)	The CLOs evaluation against the whole program is done using **indirect assessment** data. Since an **indirect assessment, including:** • Student survey, • Alumni survey, • Exit survey, …….etc. • ASIIN and NCAAA reviewers' reports	• End of the semesters. • End of the academic year.
Learning resources Evaluation	• Student • Graduates, • Alumni, College and program leaders, • Administrative staff. • Independent reviewers (e.g. ASIIN and NCAAA reviewers)	This was done through an **indirect assessment, including method:** • Student survey, • Alumni survey, • Exit survey, …….etc. • ASIIN and NCAAA reviewers reports	• End of the semesters. • End of the academic year.

Evaluation Areas/Aspects (e.g., leadership, effectiveness of teaching & assessment, learning resources, partnerships, etc.)
Evaluation Sources (students, graduates, alumni, College, program leaders, administrative staff, employers, independent reviewers, and others (specify)
Evaluation Methods (e.g., Surveys, interviews, visits, etc.)
Evaluation Time (e.g., beginning of semesters, end of academic year, etc.)

8. Program KPIs*

The period to achieve the target (3) years.

No	KPIs Code	KPIs	Target	Measurement Methods	Measurement Time
1	KPI-P-01	70%	80%	• The Independent External/Internal Program Reviewers (ASIIN & NCAAA). • The Final Program Annual Report • The semester course report. • Academic Staff Program Survey • Student Survey. • Program Student Survey • Graduate Program Student Survey. • The Program Stakeholders. • The Advisory Committee Members.	The beginning of the next year first semester
2	KPI-P-02	50%	60%	Graduate program Student Survey	The end of the semester 7 & 8
3	KPI-P-03	76%	85%	Program Student Survey	The end of the semester 6 & 7 & 8
4	KPI-P-04	30%	60%	Statistical Database	The beginning of the next semester
5	KPI-P-05	90%	95%	Statistical Database	The beginning of the next semester
6	KPI-P-06	Not available	-	-	-
7	KPI-P-07	36.3%	60%	Alumni Survey	After the graduation 6 months at least
8	KPI-P-08	17	20	Statistical Database	The end of each semester
9	KPI-P-09	Not available	-	-	-
10	KPI-P-10	80%	90%	Program Student Survey	The end of the semester 6 & 7 & 8
11	KPI-P-11	2.34:1.0	2.0:1.0	Statistical Database	The end of the academic year
12	KPI-P-12	M=53.12% (Al-Abdiyyah Campus) F=46.88% (Al-Zaher Campus) [Professor = (M=11 & F=5) Associate Professor= (M=13 & F=6) Assistant Professor= (M=9 & F=18) Assist. Teaching Staff (M=1 & F=1)]		Statistical Database	The end of the academic year
13	KPI-P-13	2.5%	0%	Statistical Database	The end of the academic year
14	KPI-P-14	75%	80%	Statistical Database	The end of the academic year
15	KPI-P-15	50%	70%	Statistical Database	The end of the academic year
16	KPI-P-16	50%		Statistical Database	The end of the academic year

No	KPIs Code	KPIs	Target	Measurement Methods	Measurement Time
17	KPI-P-17	67%	80%	• Graduate program Student Survey • Program Student Survey • Academic Staff Program Survey	The end of the academic year

* including KPIs required by NCAAA

I. Specification Approval Data

Council / Committee	
Reference No.	
Date	