



Physics Program



Kingdom of Saudi Arabia

**National Commission for Academic Accreditation
and Assessment**

**SELF-STUDY REPORT FOR HIGHER
EDUCATION PROGRAMS
(SSRP)**

PHYSICS PROGRAM

2014/2015



Self-Study Report for Higher Education Programs (SSRP)

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Physics Program



Self-Study Report for Higher Education Programs (SSRP)

Umm Al-Qura University

The University of Umm Al-Qura was established in 1981 by the royal decree number 39 on 30/7/1981 . During the first decade of the fifteenth Higri century the Colleges of Da'wa (Call to Islam), Arabic Language, Applied Sciences, Social Sciences, Engineering and Islamic Architecture were established, beside the College of Education. By the establishment of the College of Medicine and Medical Sciences in 1997 in Makkah. The University offers the Bachelors, Graduate Diplomas, Masters and Ph.D degrees in Islamic Studies, Arabic Language, Education, Social Sciences, Applied Sciences, Medicine and Engineering. In 1986 the Custodian of the Two Holy Mosques laid the foundation stone of Al-'Abdiyah campus to continue the university's educational progress in Makkah and meet the rising demand of the increasing numbers of students. In 1995 the College of Shari'a and Islamic studies, the College of Applied Science, the College of Arabic Language and the College of Engineering and Islamic Architecture began the gradual move to the new campus of Al-'Abdiyah campus, followed by the College of Medicine and Medical Studies which was established by a royal decree in 1997. Currently, there are three campuses in Makkah (In Aziziyah, In Al-Zahir, housing the Deanship of Girls Undergraduate Studies and In Al-'Abdiyah). Umm Al-Qura university gives a special attention to research and publication and community service. The University is playing a significant role in these fields.

The College of Applied Sciences

College of Applied Sciences is the first scientific college at Umm Al-Qura University. The college was established in 1401 A.H. and includes four departments (Physics, Mathematics, Chemistry and Biology). The college departments award Bachelor's and Master's degrees and also the departments of Chemistry and Biology award the Ph.D. degree. The College of Applied Sciences has taken further steps to enhance its scientific

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programs and lab as well as research facilities. It now has over 60 laboratories as well as an interactive training centre that is concerned with giving students the opportunity to train at governmental sectors and private sector establishments. Amplifying scientific programs, particularly those dedicated to serve the society as well as introducing new Ph.D. programs to the departments of Mathematics and Physics; and Starting new departments (e.g. the Department of Environmental Studies) and centres of distinction as well as creating different academic posts of specialization in tandem with a number of international research centres.

Department of Physics

The physics department is one of the oldest departments in the Faculty of Science and has been established with a number of other departments (Physics, Mathematics, Chemistry and Biology) in 1401 A.H. Department of physics developed a comprehensive and includes research groups enriched research and contributed to the renaissance of this country. Many factories and companies contribute with faculty member as advisers. The department requires a student's successful fulfilment of 142 credit hours in eight levels, each ranging from 9 to 22 credit hours, for four years of study. The vision of the department is to be a pioneer in physics, medical physics and their application at the local and international. Highly distinguished education and creative research to serve society and contribute toward knowledge based economy, creative and scientific research. The message of the department is to be a creation and discrimination in higher education and scientific research in physics and medical physics and graduate students with high scientific and technical skills and contribute to the development of society. The objectives of the department are achieving leadership in higher education, scientific research and community service. Raise the level of graduates through total quality standards. Preparation of development and innovative educational programs that qualify graduates to keep up with the demands of the knowledge society and the work market. Provide students with the basic knowledge and skills in the field of physics and medical

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physics. Enhance scientific research and professional skills of the researchers to contribute the scientific research and its applications. Serving society through effective partnership. Partnerships with research centers and universities in the world. Attract distinguished scientific and administrative

Introductory Comments

A program self-study is a thorough examination of the quality of a program. The mission and objectives of the program and the extent to which they are being achieved are thoroughly analysed according to the standards for quality assurance and accreditation defined by the NCAAA. A Self Study Report for Programs (SSRP) should be considered as a research report on the quality of the program. It should include sufficient information to inform a reader who is unfamiliar with the program about the process of investigation and the evidence on which conclusions are based to have reasonable confidence that those conclusions are sound. Conclusions should be supported by evidence, with verification of analysis and advice from others able to offer informed and independent comments. This SSRP should include all the necessary information for it to be read as a complete self-contained report on the quality of the program. The main branch/location campus must complete the entire SSRP together with the required information from all branch/location campuses that offer the program. Each branch/location campus must complete an abridged, short version, of the SSRP; including the Periodic Program Profile, Profile sections (A-H) and standards 3, 4, and 11. After analysis and inclusion of required information, the main branch campus will submit the complete SSRP with the abridged versions to NCAAA. The Self Study Report for Programs template is for an Undergraduate Program. For guidance on the completion of this template, please refer to the Handbook for Quality Assurance and Accreditation and to the Guidelines for Using the Template for a Program Self-Study.



Physics Program



A GENERAL INFORMATION

Institution: Umm Al-Qura University
Title of College and Department in which the program is offered Faculty of Applied Sciences - Department of Physics
Title of Program: B.Sc. in physics
Date of Report : 2015
Name and Contact details for Dean: Prof. Sameer Natto
Name of Person Responsible for Preparation of Report (Head of Department) Dr. Fahad Al-Hashmi
Name and contact details for person to contact for further information about matters discussed in the report and for arrangements for an external review visit. (if different from above)

B. GENERAL PROGRAM PROFILE INFORMATION

1. Program title and code Physics- 403
2. Credit hours required for completion of the program: 142 hours
3. Award (s) granted on completion of the program (for community college programs, add degree granting policy)



Physics Program



B.Sc. degree in Physics

4. Major tracks or pathways within the program:

Tracks (Physics)

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

- Administrator, Laboratory Technician, Research Assistant (Ministry of Higher Education)
- Teacher, Laboratory Expert (Ministry of Education)
- Researcher in research centres (Ministry of Education)
- Expert in Quality Labs. (Saudi Standard, Metrology and Quality Organization)
- Technician in Naive Hospital and Salesman of Scientific preparation companies.
- Private sector such as analytical, ,mathematical and computational skills in the private companies as well as special media
- Researcher and Technician (In King Abdul-Aziz City for Science and Technology)

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

Dr. Fahad Al-Hashmi (Head of Physics Department and Program Chair)

Dr. Ameenah Alahmadi (Deputy head of the department)

Prof. Roshdi Seoudi (PR Person)

Dr. Afaf Meawd (PR Person)

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

Main Campus (Al Abdiaa for male, Al Zaher for female)



Physics Program



<p>8. Date of approval of program Specification within the Institution</p> <p>The program was started in 1419. Since then, the study plan has been updated several times. The last update was approved in 1435 H</p>
<p>9. Date of approval by the authorized body (Ministry Of Higher Education “MoHE” for private institutions) and Council of Higher Education for public institutions).</p> <p>1419</p>
<p>10. Date of most recent self-study (if any)</p> <p>1434-1435/2013-2014</p>
<p>11. Provide Institutional and Program level administrative flowcharts</p> <p>Note that a number of other documents giving general information about the program should be provided in addition to the program report. See list at the end of this template.</p>



Physics Program





Physics Program



C. PERIODIC PROGRAM PROFILE TEMPLATE B: COLLEGE DATA

College: Faculty of Applied Sciences - Department of Physics , **Program:** B.Sc. degree in Physics

***(On Campus Programs, Distance Learning)**

No.	Faculty/ Teaching Staff Names			Nationality	Academic rank	General speciality	Specific speciality	Institution graduated from	Degree	Study mode	List course tout this acadimice year	Full or part time	
	Name	M	F									F/T	P/T
1	Abdul_Aziz Mohamad Sedeeq Saeed Kutb	M		Saudi	Prof.	Physics	Solid State	Brghton University	Ph.D	Within campus	Solid State - semiconductors	F/T	
2	Abdul_Aziz Rashad Soroogi	M		Saudi	Assoc. Prof.	Physics	environmental		Ph.D	Within campus	general physics 1	F/T	
3	Abdul_Mageed Omr Ali Taymomi	M		Tunesian	Ass. Prof.	Physics	solid state		Ph.D	Within campus	semiconductors - atomic physics	F/T	
4	Abdul_Rahman Masood Daif Allah Al_Oteebe	M		Saudi	Demonstrator	Physics	Physics		BSc.	Within campus		F/T	
5	Abdul_Rahman Yosef Mohamad Lasheen	M		Egyptian	Ass. Prof.	Physics	materials science		Ph.D	Within campus	classical mechanics - general physics 2	F/T	
6	Abeer Ahmad Abdullah Al_Sreehi		F	Saudi	Demonstrator	Physics	Physics		BSc.	Within campus	general physics 2	F/T	
7	Adel Mohamad Al_Hashemi Al_Madani	M		Tunesian	Assoc. Prof.	Physics	Solid state	Tunis University	Ph.D	Within campus	nuclear physics - lab. Of optics	F/T	
8	Afaf Moawad Abdul_Mageed Ali		F	Egyptian	Ass. Prof.	Physics	optics	Mansoura University	Ph.D	Within campus	Advanced optics - atomic physics	F/T	
9	Ahmad Makbool Mohamad Hekami	M		Saudi	Demonstrator	Physics	Physics		BSc.	Within campus		F/T	
10	Ahmad Mohamad El_Hady Abdul_Ghafa Abdul_Ati	M		Egyptian	Ass. Prof.	Physics	solid state		Ph.D	Within campus	thermodynamics - statistical physics	F/T	



Physics Program



No.	Faculty/ Teaching Staff Names		Nationality	Academic rank	General speciality	Specific speciality	Institution graduated from	Degree	Study mode	List course tout this acadimice year	Full or part time	
11	Ahmad Yosef Ahmad bargawi	M	Saudi	Ass. Prof.	PHYSICS	SOLID STATE	Levbra University	Ph.D	Within campus	general physics 1	F/T	
12	Al_Hussieny Al_Taher Mahdy Mohamed	M	Egyptian	Ass. Prof.	PHYSICS	RADIATION PHYSCS	Ain Shams University	Ph.D	Within campus	Statistical physics - Computer in physics - nuclear physics	F/T	
13	Al_Mongy Al_Sasi Omar Binmos	M	Tunesian	Ass. Prof.	PHYSICS	SOLID STATE		Ph.D	Within campus	electricity and magnetism	F/T	
14	Ali Saleh Aal_Sharaa Al_Shamrani	M	Saudi	Ass. Prof.	PHYSICS	PHYSICS		Ph.D	Within campus		F/T	
15	Ameena Naif Mohamad Al_Ahmadi		F Saudi	Ass. Prof.	PHYSICS	NANO SCIENCE	Ohio University	Ph.D	Within campus	Quantum mechanics	F/T	
16	Anas Alaa Asad Mohder	M	Saudi	Demonstrator	PHYSICS	PHYSICS		BSc.	Within campus		F/T	
17	Arwa Mohamad Abdul_Hakeem Bokhari		F Saudi	Demonstrator	PHYSICS	PHYSICS		BSc.	Within campus		F/T	
18	Asmhan Saud Ali Al_Shekhi		F Saudi	Demonstrator	PHYSICS	PHYSICS		BSc.	Within campus	electricity and magnetism	F/T	
19	Ayda Radwan Tolbah Ebraheem		F Egyptian	Ass. Prof.	PHYSICS	MEDICAL PHYSICS	Cairo University	Ph.D	Within campus	medical imaging	F/T	
20	Badee Abd-Elhaleem Awiess	M	Egyptian	Ass. Prof.	PHYSICS	PHYSICS		Ph.D	Within campus	General physics	F/T	
21	Balsam Fahd Ebraheem Soofi		F Saudi	Demonstrator	PHYSICS	PHYSICS		BSc.	Within campus	general physics 2	F/T	
22	Danya Abdul_Rehem Meki Sendi		F Saudi	Demonstrator	PHYSICS	PHYSICS		BSc.	Within campus	lab of electricity and magnetism	F/T	
23	Dawood Bin Abu_Bakr Bin Moosa Watrah	M	Saudi	Demonstrator	PHYSICS	PHYSICS		BSc.	Within campus		F/T	



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No.	Faculty/ Teaching Staff Names			Nationality	Academic rank	General speciality	Specific speciality	Institution graduated from	Degree	Study mode	List course tout this acadimice year	Full or part time	
24	Doaa Abdul_Allah sayed Mahmood		F	Egyptian	Ass. Prof.	PHYSICS	COMPOUTER IN PHYSICS	Ain Shams University	Ph.D	Within campus	classical mechanics -	F/T	
25	Ebthal Mastoor Khedr Al_Thebei		F	Saudi	Demonstrator	PHYSICS	PHYSICS		BSc.	Within campus		F/T	
26	Efat Abdul_Allah Ali Ali Rashed		F	Saudi	Demonstrator	PHYSICS	PHYSICS		BSc.	Within campus		F/T	
27	Eman Abdul_Baset Gaber Madkhli		F	Saudi	Demonstrator	PHYSICS	PHYSICS		BSc.	Within campus	general physics 2	F/T	
28	Eman Saleh Awad Rokaan		F	Saudi	Demonstrator	PHYSICS	PHYSICS		BSc.	Within campus		F/T	
29	Eman Ahmad Abdul_Raheem Bokhari		F	Saudi	Demonstrator	PHYSICS	PHYSICS		BSc.	Within campus		F/T	
30	Esam Abdullah Abdul_Rahman Al_Afrag	M		Saudi	Ass. Prof.	PHYSICS	SOLID STATE		Ph.D	Within campus	mathematical physics	F/T	
31	Esam Hamed Mohamad Al_Ahdal	M		Saudi	Prof.	PHYSICS	OPTICS	Ohio University	Ph.D	Within campus	optics - Advanced optics	F/T	
32	Fahd Abdullah Shokr Al_Hashemi	M		Saudi	Ass. Prof.	PHYSICS	PHYSICS		Ph.D.	Within campus		F/T	
33	Fawzya Mohamad Mokhtar Turkestani		F	Saudi	Demonstrator	PHYSICS	PHYSICS		BSc.	Within campus	atomic physics	F/T	
34	Fayz Hmad Hmood Al-Ghorabie	M		Saudi	Prof.	PHYSICS	MEDICAL PHYSICS	Wales University	Ph.D	Within campus	radiotherapy	F/T	
35	Fayza Abdul_Kader Hasan Agag		F	Saudi	Lecturer	PHYSICS	PHYSICS		MSc.	Within campus	General physics 2	F/T	
36	Galal El_Naser El_Hady Al_Wafalyi	M		Tunesian	Ass. Prof.	PHYSICS	SOLID STATE		Ph.D	Within campus	lab. Of general physics 2 - general physics 1	F/T	



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No.	Faculty/ Teaching Staff Names	Nationality	Academic rank	General speciality	Specific speciality	Institution graduated from	Degree	Study mode	List course tout this acadimice year	Full or part time	
37	Gazi Abdallah mohamed Abd Elwahed	F	Saudi	Demonstrator	PHYSICS			Within campus		F/T	
38	Ghada Abd-Elrahman Kheder Mobark	F	Saudi	Demonstrator	PHYSICS			Within campus		F/T	
39	Hanan Hosien Ebraheem Amer	F	Egyptian	Ass. Prof.	PHYSICS	BIO-PHYSICS	Cairo University	Ph.D	Within campus	ultrasound in medicine	F/T
40	Hend Abdul_Aziz Ahmad AL_Hagagi	F	Saudi	Lecturer	PHYSICS	PHYSICS		MSc.	Within campus	mathematical physics	F/T
41	Hoda Ahmad Abdullah AL_Allawi	F	Saudi	Demonstrator	PHYSICS	PHYSICS		BSc.	Within campus	general physics 2	F/T
42	Hoda Gowybr Aneez AL_Salmi	F	Saudi	Lecturer	PHYSICS	PHYSICS		MSc.	Within campus	computer in physics	F/T
43	Hosam Salah El_Deen Mohamad Ebraheem	M	Egyptian	Ass. Prof.	PHYSICS	BIO-PHYSICS	Mansoura University	Ph.D	Within campus	membrane - electrical properties of biological materials	F/T
44	Khaled Abdul_Waged Mohamad Abdul_Lateef	M	Egyptian	Prof.	PHYSICS	NUCLEAR PHYSICS	Banha University	Ph.D	Within campus	mathematical physics	F/T
45	Khaled Ali Mohamad Ali Magraby	M	Saudi	Lecturer	PHYSICS	PHYSICS		MSc.	Within campus	electricity and magnetism - instrumentation	F/T
46	Maha Mohamad Omr Khayat	F	Saudi	Ass. Prof.	PHYSICS	SOLID STATE		Ph.D	Within campus	electronics - solid state	F/T
47	Mehrz Al_Sheryani Mohamad Lolo	M	Tunesian	Ass. Prof.	PHYSICS	SOLID STATE		Ph.D	Within campus	classical mechanics - lab of physics 2	F/T
48	Mofeed Mahmud Hosein AL_Magrbi	M	Joudanian	Assoc. Prof.	PHYSICS	SOLID STATE		Ph.D	Within campus	Classical mechanics - optics	F/T
49	Mohamad Boustimi	M	Franch	Ass. Prof.	PHYSICS	ATOMIC PHYSICS	Paris University	Ph.D	Within campus	quantum mechanics - electromagnetism	F/T



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No.	Faculty/ Teaching Staff Names		Nationality	Academic rank	General speciality	Specific speciality	Institution graduated from	Degree	Study mode	List course tout this acadimice year	Full or part time	
50	Mohamad Abdul_Aziz Mohamad Sedeeq Kutb	M	Saudi	Demonstrator	PHYSICS	PHYSICS		BSc.	Within campus		F/T	
51	Mohamad Khalel Mohamad AL_Turkestani	M	Saudi	Ass. Prof.	PHYSICS	SOLID STATE		Ph.D	Within campus	lab of physics 2	F/T	
52	Mohamad mahmod Sabri Salah El_Deen Mohamad	M	Egyptian	Assoc. Prof.	PHYSICS	RENEWABLE ENERGY	Ain Shams University	Ph.D	Within campus	mathematical physics - optics	F/T	
53	Mohamad Omar Mohamad Babteen	M	Saudi	Ass. Prof.	PHYSICS	SOLID STATE		Ph.D	Within campus	electromagnetism 1	F/T	
54	Mohamad Owaid Fahd AL_Omary	M	Saudi	Lecturer	PHYSICS	PHYSICS		MSc.	Within campus	general physics 1	F/T	
55	Noha Farag Mohamad Abdullah AL_Harbi		F	Saudi	Lecturer	PHYSICS		MSc.	Within campus	optics	F/T	
56	Noor Mahmod Mohamad Abdullah Basafr		F	Saudi	Demonstrator	PHYSICS		BSc.	Within campus	instrumentation	F/T	
57	Omaima Abdul_llah Abdul_Raheem Bawazeer		F	Saudi	Demonstrator	PHYSICS		BSc.	Within campus		F/T	
58	Rabab Khaled Mohamad Sendi		F	Saudi	Lecturer	PHYSICS		MSc.	Within campus		F/T	
59	Ramadan Ali Hasan Ali	M	Egyptian	Ass. Prof.	PHYSICS	MEDICAL PHYSICS	Cairo University	Ph.D	Within campus	general physics 1 - medical physics medical radiation physics	F/T	
60	Roshdi Saudi Mohamad Awad	M	Egyptian	Prof.	PHYSICS	NANOMATERIAL SPECTROSCOPY	Cairo University	Ph.D	Within campus	electromagnetism 1 - electromagnetism 2	F/T	
61	Said Mohamad Mohamad Attia	M	Egyptian	Assoc. Prof.	PHYSICS	SOLID STATE	Tongji University	Ph.D	Within campus	Advanced optics - electromagnetism 2 - Quantum mechanics	F/T	



Physics Program



No.	Faculty/ Teaching Staff Names			Nationality	Academic rank	General speciality	Specific speciality	Institution graduated from	Degree	Study mode	List course tout this acadimice year	Full or part time	
62	Saif El_Esam Abdul_Salam	M		Indian	Ass. Prof.	PHYSICS	NUCLEAR PHYSICS		Ph.D	Within campus	General physics 2	F/T	
63	Saleh Marzook Berki AL_Lokmani	M		Saudi	Ass. Prof.	PHYSICS	PHYSICS		Ph.D	Within campus		F/T	
64	Samer Solyman Ahmad Neto	M		Saudi	Prof.	PHYSICS	MEDICAL PHYSICS	Wales University	Ph.D	Within campus	isotopes in medicine	F/T	
65	Samera Abd-Allah Shokr Elhashemy		F	Saudi	Demonstrator	PHYSICS	PHYSICS					F/T	
66	Samr Mohamad Sadoon AL_Selmi		F	Saudi	Demonstrator	PHYSICS	PHYSICS		BSc.	Within campus		F/T	
67	Saud Hameed Ahmad AL_ahyani	M		Saudi	Prof.	PHYSICS	MEDICAL PHYSICS	Surrey University	Ph.D	Within campus	computer in medicine	F/T	
68	Sohier Mohamed Abd-Elmoaty		F	Egyptian	Prof.	PHYSICS	NUCLEAR PHYSICS		Ph.D	Within campus	Nuclear physics	F/T	
69	Solyman hamd Mosalam AL_Mosalam	M		Saudi	Assoc. Prof.	PHYSICS	PHYSICS	Cairo University	Ph.D	Within campus	general physics 2	F/T	
70	Taha Mohamad Taha AL_Fawaal	M		Egyptian	Ass. Prof.	PHYSICS	RADIATION PHYSICS		Ph.D	Within campus	medical radiation physics	F/T	
71	Tasneem Malak Mohamad Deen Azeem		F	Bakistani	Ass. Prof.	PHYSICS	NUCLEAR PHYSICS		Ph.D	Within campus	physics 1	F/T	
72	Thamer Salman Faleh AL_Omeery	M		Saudi	Demonstrator	PHYSICS	PHYSICS		BSc.	Within campus		F/T	
73	Turky Othman Hameed AL_Maatani	M		Saudi	Lecturer	PHYSICS	PHYSICS		MSc.	Within campus		F/T	
74	Wadha Farag Elessemi		F	Saudi	Demonstrator	PHYSICS	PHYSICS		BSc.	Within campus	general physics	F/T	



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No.	Faculty/ Teaching Staff Names			Nationality	Academic rank	General speciality	Specific speciality	Institution graduated from	Degree	Study mode	List course tout this acadimice year	Full or part time	
75	Waleed Blkasem Al_Ekremi Balhag	M		Tunesian	Ass. Prof.	PHYSICS	THEORETICAL PHYSICS		Ph.D	Within campus	nuclear models - mathematical physics	F/T	
76	Waleed Gameel Ahmad Altaf	M		Saudi	Assoc. Prof.	PHYSICS	RADIATION PHYSICS		Ph.D	Within campus	radiation physics	F/T	
77	Yosry Mohamad Eid Moustafa	M		Egyptian	Prof.	PHYSICS	SOLID STATE		Ph.D	Within campus	electronics - semiconductors	F/T	
78	Zaynab Solyman Ali Matter		F	Saudi	Ass. Prof.	PHYSICS	PHYSICS		Ph.D	Within campus	thermodynamics - statistical physics	F/T	



Physics Program

Number of Graduates in the Most Recent Year

	Undergraduate Students				Post Graduate Masters Students	Post Graduate Ph.D. Students
	1433-34	1432-33	1431-32	1430-31		
Male	56	53	72	73	-----	-----
Female	98	73	80	71	-----	-----
Totals	154	126	152	144	-----	-----

Apparent Student Completion Rate:

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

Students	Undergraduate Programs			Postgraduate Programs	
	Four Years	Five Years	Six Years	Master	Doctor
Male(inter 99: out 7)	7.07 %			-----	-----
Female (inter: 78: out 29)	37.18 %			-----	-----
Totals (inter 177: out 36)	20.34 %			-----	-----

Mode of Instruction – Student Enrolment (excluding preparatory program)

Students	On Campus Programs			Distance Education Programs		
	Full time	Part time	FTE	Full time	Part time	FTE
Male	305	----	-----	----	----	-----
Female	964			----	----	-----
Totals	1269			----	----	-----

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

Mode of Instruction – Teaching Staff (excluding preparatory program)



Physics Program

Number of Teaching Staff	On Campus Programs			Distance Education Programs		
	Full time	Part time	FTE	Full time	Part time	FTE
Male	45	-----	-----	-----	-----	-----
Female	33	4	3	-----	-----	-----
Totals	78	4	3	-----	-----	-----

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

D. PROGRAM PROFILE DATA

Historical Summary

The physics department is one of the oldest departments in the Faculty of Science and has been established with a number of other departments (Physics, Mathematics, Chemistry and Biology) in 1401 A.H (1981). Department of physics developed a comprehensive and includes research groups enriched research and contributed to the renaissance of this country. The department requires a student's successful fulfilment of 142 credit hours in eight levels, each ranging from 9 to 22 credit hours, for four years of study. Many factories and companies contribute with faculty member as advisers. The Program had been developed in 1419.

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

- when and why it was introduced
- student enrollment history
- relationships with industry or professional advisory groups
- graduate employment outcomes
- major program changes.

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

Preparatory or Foundation Program



Physics Program



Do you offer a preparatory program **Yes** **No**

If yes, is the preparatory program is offered is it out-sourced? **Yes** **No**

If a preparatory or foundation year program is provided prior to entry to this program, are all students required to take that program? **Yes** **No**

If yes, how many Academic credits are granted into the program and included in the * GPA

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

List the courses that are granted into the program.

Level 1			Level 2		
Course Code	Course Name	Prerequisite	Course Code	Course name	Prerequisite
403101-4	General Physics 1		403102-4	General Physics 2	404101+403101
402101-4	General Chemistry 1		403121-4	Electricity and Magnetism	404101+403101
404101-4	Differentiation and Integration 1		404102-4	Differentiation and Integration 2	404101
705101-2	English Language		404140-4	Algebra Fundamental	404101
601101-2	Islamic Culture 1		401101-2	General Biology Plant	
605101-2	Quran 1		401102-2	General Biology Animal	
18	Total		20	Total	
Level 3			Level 4		
Course Code	Course Name	Prerequisite	Course Code	Course name	Prerequisite
403212-3	Heat and Thermodynamic	404102+402102	403213-3	Statistical Thermodynamic	403212
403231-4	Optics	404102+402102	403242-3	Theoretical Physics 2	403240
403240-3	Theoretical Physics 1	404102	403245-3	Classical Mechanics 2	403241
403241-4	Classical Mechanics 1	404102+402102	403253-4	Atomic physics	403240+40231
403285-3	Measurements	403121	705102-3	Communication in English 1	705101
501101-2	Arabic Language		601201-2	Islamic Culture 2	601101
19	Total		18	Total	
Level 5			Level 6		
Course Code	Course Name	Prerequisite	Course Code	Course name	Prerequisite
403332-3	Electromagnetism 1	403242+403285	403342-3	Electromagnetism 2	403332
403344-4	Quantum Mechanics 1	403252+403242	403345-3	Quantum Mechanics 2	403344
403346-2	Theoretical Physics 3	403242	403361-4	Nuclear Physics 1	403344+403253
403371-3	Solid Stat 1	403253	403382-2	Workshop	403381
601301-3	Islamic Culture 3	601201	403383-2	Computer	403242
605201-2	Quran 2	605101	705103-3	Communication in English 2	705102
			601401-2	Islamic Culture 4	601301



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17	Total		19	Total	
Level 7			Level 8		
Course Code	Course Name	Prerequisite	Course Code	Course name	Prerequisite
403423-4	Electronics	403371	403461-3	Nuclear Physics 2	403361
403432-3	Advanced Optics	403346+403231	403463-2	Nuclear Technology	403462
403462-3	Radiation Physics	403361	403372-2	Solid State 2	403471
403471-3	Semiconductor	403371	605401-2	Quran 4	605301
403493-5	Project	Department			
605301-2	Quran 3	605201			
102101-2	Alsera Alnabaweia				
22	Total		9	Total	

Total Credit hours 142

Statistical Summary

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

Student Enrolment (Not including preparatory or foundation programs) (1434)

Students	On Campus Programs			eLearning Education Programs		
	Full time	Part time	*FTE	Full time	Part time	*FTE
Male	305	-----	-----	-----	-----	-----
Female	964	-----	-----	-----	-----	-----
Total	1269	-----	-----	-----	-----	-----

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

Confirmed enrolment at the beginning of the current academic year (1434)

Level/Year of Study	Male	Female	Total
First Year	2	6	8
Second Year	23	203	226



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Third Year	72	332	404
Fourth Year	109	348	457
Fifth Year (if applicable)	-----	-----	-----
Sixth Year (if applicable)	-----	-----	-----
Total	206	889	1095

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

No. of Staff	On Campus			eLearning Education		
	Full time	Part time	FTE	Full time	Part time	FTE
Faculty	41	-----	-----	-----	-----	-----
Teaching staff	32	4	3	-----	-----	-----
		-----	-----	-----	-----	-----

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

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

Faculty and Teaching Staff Highest Qualifications (1434)

	Ph.D.		Masters		Others		Total	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Male	33	80.5 %	3	37.5 %	9	37.5 %	45	61.64 %
Female	8	19.5 %	5	62.5%	15	62.5 %	28	38.36 %
Total	41	100 %	8	100 %	24	100 %	73	100 %

Average Faculty Workload and Class Enrolment

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

	Average Credit	Average Credit	Average Class	Average Class
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Full-time Faculty	Workload 1st Semester	Workload 2nd Semester	Enrolment 1st Semester	Enrolment 2nd Semester
Male	9.43	10.36	75.33	73.42
Female	12.87	12.87	161	156.38
Total	10.853	10.1	92.1	89.61

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

1. Workload Analysis:

For first semester, the average workload for all staff is 10.85 hours. The average workload for male staff is 9.43 hours per staff, while for female staff is 12.87 which is higher than that for male staff. There is a shortage of the number of female staff. The results of first semester is close to that of the second semester.

2. Class Enrolment Analysis:

For first semester, the average class enrolment for all staff is 92.1 students per staff. The average class enrolment for male campus is 75.33 students per staff, while for female campus, 161 students per staff. This result implies the increase of the number of female staff. The result of the second semester is very close to that for the first semester.

3. Class Enrolment Level Analysis (Level means post or under graduate levels and year to year levels):

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

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



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

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

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

1. Workload Analysis:

There is no part-time faculty staff in male or female campus.

2. Class Enrolment Analysis:

3. Class Enrolment Level Analysis (Level means post or under graduate levels and year to year levels):

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

Full-time Teaching Staff	Average Credit Workload 1st Semester	Average Credit Workload 2nd Semester	Average Class Enrollment 1st Semester	Average Class Enrollment 2nd Semester
Male	15	15.5	162.5	113.5
Female	8.94	9.82	97.53	103.88
Total	9.58	10.42	104.37	104.89

Provide Analysis:



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Analyse the entire table and provide detailed class enrolment analysis of the different instructional levels.

1. Workload Analysis:

The average workload for all teaching staff is 9.58 hours for the first semester, while for second semester, the average workload for all teaching staff is 10.42 hours. The workload for male teaching staff is higher than that for female teaching staff.

2. Class Enrolment Analysis:

The average class enrolment for all teaching staff is 104.5 for first and second semester. For first semester, the class enrolment for male is higher than that for female.

3. Class Enrolment Level Analysis (Level means post or under graduate levels and year to year levels):

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

Part-time Teaching Staff	Average Credit Workload 1st Semester	Average Credit Workload 2nd Semester	Average Class Enrolment 1st Semester	Average Class Enrolment 2nd Semester
Male	-----	-----	-----	-----
Female	7	6.66	84	63.66
Total	7	6.66	84	63.66

Provide Analysis

Analyse the entire table and provide detailed class enrollment analysis of the different instructional levels.

1. Workload Analysis:

There is no part-time faculty at male campus, where the average workload at female campus is 7 hours for first semester and 6.66 hours for second semester.



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2. Class Enrolment Analysis:

The average class enrolment at female campus is 84 students per teaching staff for first semester and 63.66 students per teaching staff for the second semester.

3. Class Enrolment Level Analysis

(Level means post or under graduate levels and year to year levels):

E Self-Study Process

Provide the following:

- Provide a summary description of the procedures followed and administrative arrangements for the self- study.
- Provide a quality assurance organization flowchart.
- Describe membership and terms of reference for committees and /or working parties.

E MISSION, GOALS AND OBJECTIVES

1. Mission Statement of the Program (Insert the Mission Statement).

Vision

Achieving pioneering in pure and medical physics at local and international level, and creating active partnership with community organizations.

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.

Objectives

- 1- Achieving pioneering in higher education, scientific research and community services.
- 2- Upgrading graduates' standard through application of total quality measures.



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- 3- Preparation of innovative educational programs that qualify graduates who can adequately respond to the community needs and the labor market.
- 4- Providing students with essential knowledge and skills in the field of pure and medical physics.
- 5- Promoting scientific research and qualifying professional researchers to participate in conducting distinguished scientific research.
- 6- Serving community organization through establishing smart partnership.
- 7- Establishing smart partnership with research centers and distinguished international universities.
- 8- Attracting highly qualified scientific Cadre and distinguished administrative caliber.

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

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

2. Goals	3. Objectives for each goal	4. Performance Indicators	5. Target Benchmarks
Providing a highly educated and distinguished graduate in pure physics	1- Prepare highly qualified physicist and researchers. 2- Develop a distinguished program for pure and medical physics. 3- Develop advanced lab. 4- Employ of highly educated and distinguished professors. 5- Develop a curriculum that is responsive to the needs of the employment market.	1-Percentage of graduates qualified for pursuing higher education. 2- Number of graduates employed & time to be employed. 3 Number of graduates who get training at different societies.	
Introduction of distinctive and innovative	1- Provide advanced research labs. 2- Providing	1-number of innovative research papers,	



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scientific research work	technical training for researchers. 3- Help the researchers to publish their work in scientific journals.	2-number of research papers participated in international conferences, 3-number of activity hosted, Workshops & meetings. 4- Number of scientific projects within the department. 5- Number of post graduate students.	
Providing scientific advice to community service.	1- Make well connection with the community. 2- Provide a scientific advice that can solve problems for the community. 3-Provide all possible educational programs and training to increase the awareness and experience for the community .	1-	
Provide a list of the strengths and recommendations for improvement based on an assessment of this data.			

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

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

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

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

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

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

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NOTE:

- I. Reports on these items should be expanded as necessary to include tables, charts or other appropriate forms of evidence, including trends and comparisons with past performance, or with other institutions where relevant.)
- II. Information should be provided on performance indicators that relate directly in alignment with the mission, goals and objectives

1.State goal/objective
Providing a highly educated and distinguished graduate in pure physics.

Target benchmark or standard of performance

Result achieved or actual benchmark

Comments and analysis

2. State goal/objective
Introduction of distinctive and innovative scientific research work

Target benchmark or standard of performance

Result achieved or actual benchmark

Comments and analysis

3 State goal/objective
Providing scientific advice to community service

Target benchmark or standard of performance

Result achieved or actual benchmark

Comments and analysis

4 State goal/objective

Target benchmark or standard of performance

Result achieved or actual benchmark

Comments and analysis

5 State goal/objective



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Target benchmark or standard of performance

Result achieved or actual benchmark

Comments and analysis

F. PROGRAM CONTEXT

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

2. Enrolment Management and Cohort Analysis (complete tables on the following pages)

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

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

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

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

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

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

Enrollment Management and Cohort Analysis (Table 1)

Student Category	2007 - 08	2008 -09	2009- 10	2010 - 11	2011 - 12	2012 - 13
Total cohort enrollment	61	393	902	1386	1912	2077
Retained till year end						
Withdrawn during the year and re-enrolled the following year						
Withdrawn for good						
Graduated successfully	90	111	123	129	110	100
Provide a Cohort Analysis of the Academic Years: 2008 – 2011						



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* PYP - Preparatory Year Program

Cohort of the Academic Year: 2008 – 2009 (Table 2)

Total student enrollment at the beginning of year		74				
Progressed through the year						
Withdrawn during the year and re-enrolled the following year						
Withdrawn for good						
Graduated successfully						
Provide Analysis						

Cohort of the Academic Year: 2009 – 2010 (Table 3)

Total student enrollment at the beginning of year			77			
progressed through the year						
Withdrawn during the year and re-enrolled the following year						
Withdrawn for good						
Graduated successfully						



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Provide Analysis

Cohort of the Academic Year: 2011 – 2012 (Table 4)

Total student enrollment at the beginning of year				75		
progressed through the year						
Withdrawn during the year and re-enrolled the following year						
Withdrawn for good						
Graduated successfully						
Provide Analysis						

G PROGRAM DEVELOPMENTS

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

2. Comparison of planned and actual enrollments table.

Year	Planned Enrollment	Actual Enrollment

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



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Standard 1. Mission and Objectives Overall Rating *** Stars (3.59)

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

Explanatory note about development and use of the mission.

The vision of the Umm Al-Qura University(UQU) is (pioneering in education, scientific research and the service of the local and global society) and its mission is(with what it has from qualified human resources, advanced infrastructure, scientific programs, research priorities, and managerial and financial systems will become: (1) Trusted by the community and is it's the first choice each,(2) a world authority in accreditation for Islamic studies and Arabic language.(3) House of expertise and official references in the issue of developing the environment of Makkah and the holy places.(4) An environment that facilitates innovation in knowledge and science, according to the established world criteria). While the vision of the physics program is (to be a leadership nationally as well as internationally with an effective communistically partnership), and its mission is (to provide innovation and a high brilliant effective physical education, in higher education and in scientific research and to have a graduate with a high scientific and technical qualifications to meet the current and future society needs). By reviewing of both missions the reviewers can easily find the consistency between the mission of the program and that for the institution (UQU). Both of them concentrate and focus on the following essential themes: (1) the leading, distinctive and active role toward community services, (2) striving and work hard to get the leadership in the field of specialization (at national, regional and international levels) and to provide a creative and competitive environment that motivate students to reach that goal, (3) commitments to the values believes of Islamic religion and preserving the Islamic identity.

This mission and the real desire to its achievement were the fundamental motive and desire for most of program directions and activities. This was reflected in the written goals, values



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priorities of the program and consequently for the process of its strategic planning and the operational and developmental procedures that have been taken to achieve and maintain this mission.

Accordingly the directions of the program have been targeting the following objectives:

- 1- Achievement of national and international academic accreditation.
- 2- Graduation of outstanding physicist who is knowledgeable, skilled, professional and who demonstrate excellence in creative thinking, prevention and management of handicap.
- 3- Preparation of graduates for not only perform their professional role in patient care, but also to provide leadership for the profession, contribute to the growth of the profession, and contribute to the health care needs of society.
- 4- Engagement in lifelong academic and professional development through self-assessment, reflection, education, and feedback from others.
- 5- Demonstration of social and professional responsibility through mentoring, participation in professional and community organizations activities, and provision of pro bono services and consultations
- 6- Serving the community through enhancing specialized projects which share in solving national health problems.
- 7- Promoting collaborative research activities with other national and international universities and labs.
- 8- Promoting applied research and promote international publication in the theoretical and applied Physics field.

The values of the program are as follow:

- 1) Commitment to high standard of professionalism and ethics commended by Islam
- 2) Excellence in Learning, Practice and research
- 3) Quality, excellence and continuous improvement of performance
- 4) Life-Long Learning
- 5) Serious to handle,
- 6) Control,
- 7) System,
- 8) Commitment,

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- 9) Transparency,
- 10) Justice,
- 11) Credibility
- 12) Work in a spirit of teamwork and foster a culture of collective action
- 13) Respect and Appreciation of differences
- 14) Leadership
- 15) Mutual respect
- 16) Social responsibility
- 17) Caring, Compassion, and Empathy in providing services to patients.
- 18) Honesty

Evaluation of Quality of Mission and Objectives

The evidence obtained for ensuring the quality of mission and objectives:

- 1) The vision , mission ,objectives and values of the physics program.
- 2) Minutes of the department councils that illustrate the role of the mission in establishing directions for the development of the program that are appropriate for a program of its type and for the needs of students in the context for which they are prepared (including suggestions, recommendations and decisions in.
 - The issues concerning changing of study plan and teaching learning strategies to suit the Saudi students and to be consistent with vast changes in fields of rehabilitation worldwide.
 - Introducing new studying and developmental opportunities to meet the needs for physics profession development.
 - Presenting and opening new studying channels and pathways to meet the need for international research and to be updating with the development of Physics field and curriculum world-wise (such as post graduate studies, master of Physics etc.).
 - Designing programs and courses for the professional development and promotion (such as workshops , training courses)
- 3) The different activities and participations of the program staff in the field of community services which are consistent with the program mission.



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- 4) The different activities and participations of the program staff in the field Islamic dawa and services Holly Makkah, and King Abdulaziz City for Science and Technology which are consistent with the program mission
- 5) The different activities and participations of the program staff in the research field to be a distinct and complemented research physical program, nationally as well as regionally and classified internationally, in the natural science field.
- 6) The different activities and participations of the program staff in foe field of Achievement of national and international academic accreditation.
- 7) Minutes of foe meeting with stakeholders and beneficiaries aimed for orienting and familiarizing them with the mission of the program and its central role in guiding planning and action of the program. Also in appropriately define the programs principal purposes and priorities for them.
- 8) Minutes of department councils that demonstrate that themes and principles of the mission statement is used as a basis for a strategic plan for development of foe program over a medium term planning period.

Performance indicators:

- 1) The results of students, staff, graduate, stakeholders and beneficiaries surveys about:
 - Their opinion about the program mission
 - The consistency of foe mission with community needs
 - The role of mission in decision making process relating to the program.
- 2) The levels of orientation and awareness of Faculty members toward the program vision, mission, goals and objectives and their support for them.
- 3) The number and percentages of important decisions and program events and activities that made by reference to mission.

Summary of strengths.

- 1) The summary of strengths resulting from appropriately applying and satisfactory practicing of this standard in the physics program including the following:
- 2) The mission for foe program is consistent with the mission of the institution.
- 3) The mission is consistent with Islamic beliefs and values.



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- 4) The mission establishes directions for the development of the program that are appropriate for a program of its type and for the needs of students in the context for which they are prepared.
- 5) The mission statement is sufficiently specific to provide an effective guide to decision-making and choices among alternative planning strategies.
- 6) The mission is achievable through effective strategies within the level of resources expected to be available.
- 7) The mission statement provides clear criteria for evaluation of progress towards the goals and objectives of the program.
- 8) The mission statement is used as a basis for a strategic plan for development of the program over a medium term planning period, (normally five to seven years)
- 9) The mission statement is known about and supported by teaching and other staff and students.

Area requiring improvement:

- 1) The mission statement is not periodically reaffirmed amended if necessary in the light of changing circumstances.
- 2) Stakeholders are not always kept informed about the mission and any changes made to it.
- 3) Statements of major objectives are not accompanied by specification of clearly defined and measurable indicators that are used to judge the extent to which objectives are being achieved.

Priorities for action:

- 1) Exertion of more efforts and organization of meetings and events with stockholders aiming for explanation of appropriateness of the program mission in an accompanying statement commenting on significant aspects of the environment within which it operates. (which may relate to local, national or international issues)
- 2) The vision, mission ,objectives and values of the program need to be periodically reviewed in the light of the newest (nationally ,regionally and internationally) and changes in the physics field in collaboration with Major stakeholders associated with.
- 3) Consistency with the mission should be considered among criteria for program and project proposals by committees and decision makers.



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- 4) Inclusion of a clause stating the consistency of the program mission with the future important organizing and administrative decisions and changes in the study plan that will be taken in the program.

Standard 2. Program Administration Overall Rating * stars (3.18)**

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

Explanatory Report about this standard

- 1) Program administration provides effective leadership and reflects an appropriate balance between accountability to senior management and the governing board of the institution within which the program is offered, and flexibility to meet the specific requirements of the program concerned.
- 2) Policies and regulations that define the major responsibilities and procedures for the administration of the program and also for committees and teaching and other staff and students involved are clearly established.
- 3) Management arrangements between the program administrators and senior institutional management, and for faculty and staff within the program provide appropriate delegations of responsibility with clear guidelines setting out the scope and limits of responsibility, allowing for creativity and innovation within policy guidelines, and with clearly defined mechanisms for accountability.



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- 4) Planning processes in the department are managed effectively to achieve the mission and goals of the program through cooperative action by the department team and this include preparation of program and course reports and decision making. Planning process in the department, to a large degree, combine coordinated strategic planning with flexibility to adapt to results achieved and changing circumstances.
- 5) Teaching and other staff involved with the program meet high ethical standards of honesty and integrity including avoidance of conflicts of interest and avoidance of plagiarism in their teaching, research, administrative and service functions. These standards maintained in all dealings with students, teaching and other staff, and in relationships with other internal and external agencies including both government and non government organizations.
- 6) The quality of delivery of courses and the program as a whole are regularly monitored with adjustments made promptly in response to this feedback and developments in the external environment affecting the program.

Evaluation of quality of program administration

The evidence obtained for ensuring tile quality of mission and objectives:

- 1) Rules and regulation governing the responsibilities and rights of the members of administrative board, other staff members, employees and followers are clearly defined in the university rules and regulation booklets (available to all on line on UQU official site or printed).
- 2) The course reports for all delivered courses in the program and the program reports always include the corrective action measures that have been taken in case of the need for performing modifications in different aspect of educational process which reflect the authority of the department to do these tasks and these changes when required (such as the department has the authority to changes ILOs. teaching strategies, evaluation methods, required books, references etc as needed) .It needs only to be officially adopted by the specialized committees in the department .
- 3) Program administrators have sufficient authority to ensure compliance with formally established or agreed institutional or program policies and procedures, (the reward and punishment procedures that have been taken in this context that include for example



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- moral honoring, financial incentives, any other tangible and supportive encouragements).
- 4) Program administrators provide leadership, and encourage and reward initiative on the part of teaching and other staff (Program administrators usually introduce and save full financial and moral supports for organizing different exhibitions and events to display for staff and students educational, community and social activities . They also encourage the initiatives in all academic areas).
 - 5) The results of course evaluation surveys by students are always presented to the staff members by the head of the department.
 - 6) Minutes of department council that contain proposals and recommendations for program developments which are presented to the faculty council and for decision making body to take the appropriate decision and to determine the consequences of alternatives.
 - 7) List of staff attendance for workshops and training courses organized by different university sectors and administrations that provide the support, skills and advice for their personal and professional development.
 - 8) Minutes of department council clarifying that planning in the department is strategic and incorporating priorities for development.
 - 9) Minutes of department council and meeting with graduates, alumni and stakeholders that illustrate the involvement of teaching and other staff, students and other stakeholders in planning processes in the department.
 - 10) The establishment of Ethical Review committee in the faculty of Applied Sciences that monitor Codes of practice for ethical and responsible behaviour when dealing with matters such as the conduct and reporting on research, performance evaluation and student surveys.
 - 11) The executive letter issued by faculty and program administrators concerning formation of different committees and academic and administrative positions associated with the program are clearly specified and included in the policy and procedures manual.
 - 12) Program specifications, courses specifications, courses reports and annual program reports.



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- 13) The university regulation for employment and recruitment that include job description for different positions.

Performance indicators:

1. The numbers of decisions and corrective measures that have been taken directly by the department when any changes relating to the educational process are needed.
2. List of different administrative, academic and educational duties that have been successfully accomplished upon well-organized work and in an effective and timely manner.
3. List of staff attendance for workshops and training courses organized by different university sectors and administrations that provide the support, skills and advices for their personal and professional development.
4. The degree of the achievement of the objectives set in the annual work plans.
5. The job specifications and description for the main committees of the faculty and department contain the responsibility and accountability mechanisms, as well as clear mechanisms to assess performance.
6. The number of times that the program administrators notified all department staff with the developments occurred in it, and the current interests and issues that the department concerned.
7. Replies of the program faculty and staff to the surveys about the department work environment.

Summary of strengths

- 1- Rules and regulation governing the responsibilities and rights of the members of administrative board, other staff members, employees and followers are clearly defined in the university rules and regulation booklets (available to all on line on UQU official site or printed)
- 2- The responsibilities of program administrators are clearly defined in position descriptions.
- 3- There is sufficient flexibility at the level of the department or college offering the program to respond rapidly to course and program evaluations and changes in program learning outcome requirements.



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- 4- When certain action is needed, the different committees are directly formed, the different teams are established, the tasks are distributed to the different staff members and the timetable and the schedules for the preparatory and operational measures are detected, so that; the task be executed in an effective and timely manner.
- 5- Program administrators provide leadership, and encourage and reward initiative on the part of teaching and other staff.
- 6- Different university sectors and administration periodically organizing training courses, symposium and workshops for providing advice and support to faculty and staff in a manner that contributes to their personal and professional development.
- 7- Guidelines, bylaws or regulations are established for recurring procedural or academic issues.(such as the percentage of students absence that prevent students access to final exam, the allowed student excuses that permit the student reentry of exam he missed with keeping of his GPA,.....etc)

Areas requiring improvement:

- 1- The stakeholder of the program should be aware and oriented with different department plans. The impacts and retirements for different constituencies of these plans should also make clear to them.
- 2- The need for developing of monitoring mechanisms to checks the implementation and execution of plans against short term and medium term targets and also for outcomes evaluation.
- 3- Preparation of periodical reports on key performance indicators for the planning process of different issues and presenting them to senior management within the institution on regular time

Priorities for action.

1. The stakeholder of fee program should be aware and oriented wife different department plans. The impacts and requirements for different constituencies of these plans should also make clear to them.



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2. Planning processes must involve stakeholders (eg. students, professional bodies, industry representatives, faculty) in establishing goals and objectives and reviewing and responding to results achieved.
3. The need for developing of monitoring mechanisms to checks the implementation and execution of plans against short term and medium term targets and also for outcomes evaluation.

Standard 3. Management of Program Quality Assurance Overall Rating ** Stars (2.6)

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

Explanatory report about this standard

- The quality assurance processes are fully integrated into normal planning and program delivery arrangements. These processes are designed to ensure both that acceptable standards are met, and that there is continuing improvement in performance.
- Quality assurance processes make use of standard forms and survey instruments to be used across the institution and it is accessible , clear and posted on fee UQU website published by Quality Assurance Deanship.
- The quality evaluations deal with all aspects of program planning and deliver including inputs, processes, outcomes and facilities, with particular attention to learning outcomes students. Also the evaluations cover both routine activities and strategic priorities for improvement.
- Processes for evaluation of quality is transparent with criteria for judgments and evidence considered made clear.



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- Improvements in quality are appropriately acknowledged and outstanding achievements recognized, in addition, the evaluation and planning for quality improvement are integrated into normal administrative processes.
- Statistical data which include grade distributions, progression and completion rates are retained in an accessible central database and regularly reviewed and reported in annual and periodic program reports. -Self-assessments of the quality of performance are checked against related evidence including feedback through using surveys and opinions of stakeholders such as students, faculty, graduates and employers.
- All teaching and other staff participate in self-assessments and cooperate with reporting and improvement processes in their sphere of activity. Mistakes and weaknesses are acknowledged, and dealt with constructively, with a help given for improvement.
- Responsibility is given to the most experienced member of the teaching staff (The previous head of the department) to provide leadership and support for the management of quality assurance processes. The responsible person involves other staff in the activities of the quality assurance centre.

Evaluation of Quality of Mission and Objectives

The evidence obtained for ensuring the quality of mission and objectives:

- 1- The participation of faculty and other staff in the program in the quality assurance processes.
- 2- The meetings of the board of the department and the decision establishing a committee of quality in the department in addition to the successive follow-up to the work of this committee and the establishment of sub-committees in it.
- 3- The establishment of graduate committee in the program and their critical role in continuous communication with the graduates and gathering the reports that related to employers' opinions about the quality of the program graduates beside designing a web form of the NCAAA surveys that related to graduate evaluation in order to create an easily and continuous way of communication with the stakeholder, which consider one of the critical ways for receiving a feedback about the program product.



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- 4- The results of the NCAAA surveys with its statistical analysis and interpretation which reflects in an objective method the response of the students and their level of satisfaction towards the different aspects of the program and teaching process.
- 5- Staff surveys for quality assurance processes and the uses of the results in planning strategies.
- 6- The average scores of students' satisfaction with their experience in the program.
- 7- Percentage of students who were polled during the year.
- 8- The percentage of the faculty staff supporting for program strategies adopted to improve the quality.
- 9- The percentage of the faculty members who the students evaluate their teaching.
- 10- Steps that have been taken in response to the evaluations conducted for the program and other decisions.
- 11- Students Cumulative data which indicate that there is continuous improvement in the planning and management in the learning outcomes achieved by students.
- 12- The regular meeting and discussions with faculty , staff or students in the program.
- 13- The reports prepared by the organizers of the program which explain the future plan to cover the different area of weakness.
- 14- Steps that have been taken by the head of the department and by the faculty dean in response to the various evaluation processes that have been conducted .

Summary of strengths.

- 1) Quality assurance arrangements for the program meet the particular requirements for the program as well as that of the institution as a whole.
- 2) The quality assurance processes are fully integrated into normal planning and program delivery arrangements.
- 3) The quality assurance activities are applied to all aspects for program planning and delivery including provision of related services, and to all teaching and other staff involved in those processes.
- 4) The quality assurance processes make use of standard forms and survey instruments that provided by the NCAAA with some special additional forms (Internship Evaluation form and Learning Procedure form) that added to meet the particular requirements of the program.



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- 5) The quality assurance evaluations deal with all aspects for program planning and deliver including inputs, processes, outcomes and facilities, with particular attention to learning outcomes for students.
- 6) All teaching and other staff participate in self-assessments and cooperate with reporting and improvement processes in their sphere of activity.
- 7) Responsibility is given to a member of the teaching staff to provide leadership and support for the management of quality assurance processes, fit⁴ responsible person involves other staff in the activities of the quality assurance center.
- 8) The statistical data on indicators, including grade distributions, progression and completion rates are available in an accessible central database and regularly reviewed and reported in the annual and periodic program reports.
- 9) The evaluation and planning for quality improvement are integrated into normal administrative processes.

Area requiring improvement:

- 1- Using of key performance indicators and benchmarks is followed occasionally but the quality is poor.
- 2- Additional key performance indicators relevant to the program are needed also more information is needed to be provided regularly on the key performance indicators that are selected for all programs in the institution.
- 3- benchmarks for comparing quality of performance are not completely established and achievements in relation to those benchmarks needing further monitoring.
- 4- Additional benchmarks for the program should be approved by the appropriate senior committee or council within the institution .
- 5- The format for indicators and benchmarks of the program is not fully consistent with that adopted for the institution as a whole.
- 6- There is a need for further action to improve performance in proceedings the interpretations of evidence of quality of performance that verified through independent advice from persons familiar with the type of activity concerned and impartial mechanisms are needed to reconcile differing opinions.

Priorities for action.

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- I. Specific indicators need to be identified ^{أه} monitoring performance and additional benchmarks selected for comparative evaluation of foe achievement of goals, objectives and quality of performance is required.
- II. Evaluations of performance must be based on evidence and conclusions based on that evidence must be independently verified.

Standard 4 Learning and Teaching. Overall Rating 3 Stars (3.14)

Student learning outcomes must be clearly specified, consistent with the National Qualifications Framework and requirements for employment or professional practice. Standards of learning must be assessed and verified through appropriate processes and benchmarked against demanding and relevant external reference points. Teaching staff must be appropriately qualified and experienced for their particular teaching responsibilities, use teaching strategies suitable for different kinds of learning outcomes, and participate in activities to improve their teaching effectiveness. Teaching quality and the effectiveness of programs must be evaluated through student assessments and graduate and employer surveys with evidence from these sources used as a basis for plans for improvement. In different sections for male and female students the standards are the same, equivalent resources provided, and evaluations include data for each section.

Description of process for investigation and preparation of report on the standard for learning and teaching. (Additional information can be provided in the sub-section below if necessary)

1. The physics program is regarded as an integral package of courses (theoretical, experimental and project) in the field of physics leading to a qualification titled bachelor of physics.
2. The self-evaluation scales are intended to provide guidance to program administrators and staff in department in their planning, self-review, and quality improvement strategies.
3. The delivery of programs and individual courses should be monitored on a continuing basis, with annual reports on what has happened and consideration of any adjustments that



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- may be needed. More extensive reviews of the quality of teaching and learning for each program have been undertaken periodically
4. High quality standards can only be achieved by honest evaluation of performance and commitment to improve, and by action planned and taken by those offering the program and providing the services on which it depends. In recognition of this evaluation of performance should be conducted in comparison with generally accepted standards of good practice. Fortunately a well valid and reliable form of evaluation based on evidence (Self-Evaluation Scales for Higher Education Programs) was recommended by NCAAA . It is a starring system used for rating these quality evaluations
 5. The quality of learning and teaching should be central to the institution's planning and quality assurance processes. The focus should be on quality of learning outcomes, which must cover a range of kinds of learning, with knowledge, skills and patterns of behaviour that are assessed within the program, and continue to be reflected in personal and professional lives after graduation. Different types of learning as described in the Qualifications Framework require different ways of teaching and different forms of student assessment, and these must be used in a systematic way in educational programs. Consequently teaching strategies and methods of assessment that are appropriate for different kinds of learning should be planned and described in program and course specifications. Generic skills such as group participation, capacity for self-directed learning, commitment to sound moral and ethical principles, and the effective use of numerical and communication skills should be reinforced and built upon in all courses.
 6. Quality of teaching is vital, and this involves appointment of teaching staff with appropriate levels of knowledge and skill for the programs to be taught, and thorough orientations so the necessary strategies for development of the range of learning outcomes and methods of assessment of those outcomes are understood.
 7. The standard for learning and teaching is the most important consideration in a program self-study. So that verification and check of the quality of performance for this standard should be firmly, seriously, transparently and realistically.
 8. The standard number 4 (teaching and learning) consisted of sub standards. Within each of those sub-standards there are a number of practices. In physics department we investigate whether these good practices are carried out and how well this is done. The team carrying



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out the self-evaluation scales within the program specially for standard of teaching and learning evaluated whether the particular practices were followed, and rated the quality of these practice in the department on a five point rating scale. Their judgements of quality were based on appropriate evidence and indicators. In our program a number of sources of evidenced are used to assess the quality students learning and the effectiveness of the strategies used to develop these abilities

9. These include such things as student questionnaires about teaching effectiveness, observation of teaching by “ critical friends”, questionnaires for graduates and employers, and external check assessments of the quality of students performance on test and assignments. In most cases these sources of evidence must be interpreted since many factors could influence ratings on surveys and evaluate judgments. Consequently several different sources of evidence are often used, with interpretations of the evidence verified by an independent person.
10. In order to be granted accreditation it was necessary for the program to provide evidence of good quality performance in relation to standard number 4 (teaching and learning) and with all of the ten subsections and their practices of this standard.
11. In our program, making assessments and judgments about quality of performance in (teaching and learning) standard were not based on general impressions but appropriate forms of supporting evidence were considered.
12. To guard against be unreliable interpretations of obtained evidences, the team that perform evaluation took into account with great respect and consideration the participation and the opinion of students, graduates, beneficiaries from the program, employer, stakeholder, labour market, distinct professional in the field of rehabilitation. As a further safeguard against be unreliable interpretation, the final judgments were reviewed and an independent opinion was given by someone who has not been involved in the initial evaluation as a check on whether the interpretations seem reasonable in the light of the evidence provided.
13. A wide range of kinds of evidences and indicators were considered specially those identified by NCAAA as a basic key performance indicators on which information should collected in all institutions. Also many additional indicators and evidences were involved in the self-study evaluation either those suggested from NCAAA or those selected by



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ourselves as a team which were relate to the program mission, objectives and priorities for improvements. The performance indicators were specified in advance and data gathered and considered as part of continuing monitoring processes. Performance evaluation was assessed by using starring system allocating grads from zero to five stars in accordance with the quality of practice and performance whether high quality performance, good performance or the requirements for improving performance.

The processes of evaluation addressed and related to:

- ✓ The extent and consistency with which good practicing was followed
 - ✓ The quality of the services or activity as assessed through systematic evaluation
 - ✓ The effectiveness of what was done in achieving intended outcomes.
1. In order to achieve the verification and preparation of report on the quality of performance in the standard 4 (teaching and learning), several organizational and administrative procedures and measures were followed
 2. A committee in the program titled the quality assurance and national academic accreditation committee was formulated and its subcommittees (as illustrated in the diagram 1) for conducting the self-assessment process for the program and get the appropriate evidence and indicators.
 3. The self-study report (SSR) for the standard number 4 (teaching and learning) has been prepared accurately and carefully and have included indicators used as evidence of performance, changes in the environment affecting the program, identify strengths and weaknesses and trend data that indicates whether standards and quality of processes and support systems od declining, and develop plans for improvement.

Subsection 4.1 Student Learning Outcomes. Overall Rating 3 Stars (2.6)

The processes for ensuring the appropriateness and adequacy of intended student learning outcomes from the program include:

- 1- Physics program is a program that is designed to provide students with the high levels of knowledge and skill required for professional occupations.
- 2- In general, professional programs should involve thorough understanding of research and theoretical knowledge in the field of study and in related areas, and develop general



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- thinking and problem solving abilities that are applicable in any context. Consequently, when designing the Physics program it was important to consider not only the levels of knowledge and skill this program are intended to develop, but also the particular knowledge and skill that is necessary for preparation of our graduates to their profession.
- 3- This involves both what is commonly included in comparable programs in other, regional and international countries, and any particular requirements relevant to the Kingdom of Saudi Arabia.
 - 4- In this context, the intended learning outcomes that have been established in the program came in consistent with professional or occupational employment requirements as indicated by expert advices or requirements of professional bodies or relevant accrediting agencies as NCAAA and the National Qualifications Framework .In so doing ,the program and its courses learning outcomes have been guided, formulated and drafted in the five domains of learning proved by The National Commission for Academic Accreditation & Assessment (NCAAA) named (Knowledge, Cognitive Skills, Interpersonal skills & responsibility, Analytic & Communication skills and Psychomotor Skills).
 - 5- The process of identifying student's outcomes in physics has been derived from the faculty and program mission and vision.
 - 6- It is also necessary to point out that while learning outcomes-setting, student special attributes and characteristics established by program, were included such as :-
 - ✓ Excellence in learning, practice , research and continuous improvement of performance in these areas.
 - ✓ The ability to recall and apply their knowledge in their personal and professional lives for many years after they graduate not just being passed tests and assignments.
 - ✓ Recognize the provisional nature of knowledge field and take this into account in investigating and proposing solutions to academic or professional issues
 - ✓ The ability to behave sensitively, transparency responsibly , and ethically in difficult situations
 - ✓ The ability to work in a spirit of teamwork and appreciation of differences.



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- ✓ The ability to take initiative in identifying and resolving problems and issues both at the individual and group levels, exercising leadership in pursuit of innovative and practical solutions .
 - ✓ The ability to apply the theoretical insights and methods of inquiry from their field of study in considering issues and problems in other contexts.
 - ✓ The continuity to extend their knowledge through habits of lifelong learning
 - ✓ Considering honesty, justice, Caring, Compassion, credibility, empathy and mutual respect in providing services to patients.
- 7- The program objectives included learning outcomes in all of the required domains of learning. Responsibility for achieving these learning outcomes have distributed appropriately across the courses within the program and included in course objectives. Program and course specifications have included different methods of teaching and student activities that are appropriate for the learning outcomes in each domain.
- 8- Assessment of learning in each domain has achieved by using appropriate tests, examinations and other required assessment tasks. An evaluation of programs and courses learning outcomes in each domain is periodically run by conducting different evaluation methods including student, graduate or employer surveys and others.

Many strategies and methods have been used by the program to verify standards of learning outcomes achieved by students such as:

1. The overall learning outcome are measured based on the continual student's assessment, quizzes, tutorial participation, presentations delivery, active participation during classes, small group discussions and feedback on clinical rounds and final exams.
2. Check marking of student scripts and assignments by an independent marker from the same or" another program with the faculty ,
3. Independent reports of external evaluators or examiners by professional colleagues from other institutions or trained evaluators on the level of difficulty in tests and assignments and the standards achieved by students.
4. Benchmarking of learning outcomes in different domains and standards of projects and assignments against assessments at other institutions.
5. External reviews of departments and programs.



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6. Program evaluations and self-assessments by students and graduates of the program using reports and surveys .
7. Surveys and reports on the skills of graduates by employers.

The evidenced processes for ensuring the appropriateness and adequacy of intended student learning outcomes from the program include :

- 1- Reports of arbitrators for the program study plan .
- 2- Reports of internal committee in the department for tests and exams questions development about the coverage of these questions for all areas of ILOs mentioned and stipulated in the course specification and their appropriateness and validation to evaluate the achievability of these outcomes .
- 3- Reports of external evaluators and examiners about the level to which the involved students acquire the intended learning skills and outcomes described in the course specifications.
- 4- Rates of success of student in each course and grades distribution.
- 5- Number and percentage of students passing each year of the program.
- 6- Rates and percentages of student successfully complete the program.
- 7- The quality assurance and academic accreditation committee in the department ensures that continuous quality management processes are followed. This includes annually reviewing course specifications for intended learning outcomes and teaching and assessment methods.

Evaluation of intended student learning outcomes

Summary of strengths

- 1- Program learning outcomes were specified and combatable with the National Qualifications Framework.
- 2- Individual course objectives and intended learning outcomes are clearly defined for all courses and are made known to all students.
- 3- Description & specifications for all courses were completed guided by templates adopted from NCAAA including detailed information about teaching strategies used to achieve the



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present learning outcomes , assessment methods for their achievability and future plans for course developments .

- 4- Learning outcomes are based on international standards and local needs.
- 5- Learning outcomes are measured in a variety of valid assessment methods.
- 6- Students overall rating and surveys for almost all courses are conducted for the quality of their program and individual courses .

Areas requiring improvement:

- 1- The gradual shift from traditional methods of teaching and education emphasizing the notion of teaching centred approach to be learning and student centre approach .This modern methods concentrate on how student learn information and skills by himself in the sense that the student is the centre of the learning process and not teaching staff.
- 2- Organizing training courses and workshops for staff members of the department on this concept and use of modern teaching ,learning , assessment and evaluation methods that satisfy these concept such as (brain storming, active learning, tern work role-play, cooperative learning ,E-learning ,scenarios ,seminars presentations)(continuous assessment throughout the year or semester and not focus on the last year assessment alone by application of the student portfolio).
- 3- The use of modem methods of assessment in practical courses, and courses which have the training field to measure all the skills set forth in the course description and academic advising booklet.

Priorities for action.

- 1- Develop a plan for a benchmarking with similar national or international programs in order to determine the extent of the program level with programs that preceded us in accreditation.
- 2- Organization of regular meeting with beneficiaries in the labor market for determining of graduate specifications and attributes in the light of national and international updates and challenges in the field of specialization. Then performing detailed study and analysis for these requirement to be reviewed by the internal program development and quality



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assurance committee to consider them and make changes in the program and courses learning outcomes within the available and allowable limit.

4. 2 Program Development Process. Overall Rating 3 stars (3.43)

The processes followed for developing the program and implementing changes that might be needed include:

- 1- Completion of program specification and its inclusion for the essential knowledge and skills to be acquired, in addition to teaching strategies and assessment methods to be followed for gradual progress in all areas of learning.
- 2- Describing almost all courses included in the program with detailed explanation for ILOs and teaching & assessment strategies that help in satisfactory achievement of this objectives.
- 3- The regular & periodic verification and reviewing of the courses throughout conducting courses reports. The processes of evaluation were based on student evaluation of course and its statistical results, list with the most important criticisms and strengths and other kinds of indicators and evaluation.
- 4- These reports include complete assessment for the process of course delivering involving evaluations for ILOs and teaching strategies used for their achievement and any action plan course instructor recommended for improving teaching strategies as a result of evolutions. t. They also include list of difficulties in access to resources or facilities, organizational or administrative difficulties encountered and consequences of any difficulties experience for student learning and course. They refer to any action taken to improve the course and results achieved (for example, professional development for faculty, modifications to the course, new equipment, new teaching techniques etc.). They state whether each action was undertaken, the impact, and if the proposed action was not undertaken or completed and reasons for this. Finally the future proposed plan for course development and executive procedures are recommended for the next semester.
- 5- These reports are presented to the curriculum and courses development committee in the program that precisely review and carefully study them to prepare a comprehensive reports about all courses and the whole program including points of strength and weakness areas requiring improvement, constraints and problems for effective course and



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program delivery, organization and administrative facilities, required and priorities for action.

- 6- The annual review of the program that was prepared by quality assurance and academic accreditation committee in the department. This report include evaluation of different courses in the program, program and courses ILOs and the extent to which they achieved, quality of teaching, statistical information about the results of different courses, factors affecting completion and progression rates, internal and external changes affecting the program. It also provide summarization about the program evaluation based on graduating student evaluation and surveys, employer and stakeholder comment on skills of graduates, independent evaluators comments, and other feedback and evaluation measures used to evaluate the quality of the program. Then the committee state its recommendation report that provide information on the most important strengths, weakness, suggestion for areas need improvements and action plan proposed and recommended for program development.
- 7- These reports then submitted to the department and faculty administrative board to take the measures and approve the executive procedures that facilitate and provide the healthy academic environment for obtaining good quality in teaching and learning process.
- 8- Another measure, which is very essential in the processes followed for developing the program, is regular completion of the rating self-evaluation scale for the program .It periodically (every two years) assess and monitor the extent to which the standards for quality assurance and accreditation according to NCAAA were applied and considered in the program .Based on this evaluation the weakened points are addressed and determined, corrective plan are designed then the action measures are scheduled to be worked on by executive team from the staff members.

Evaluation of program develop processes.

Summary of strengths.

1. Program and courses were carefully described and specified so that knowledge and skills to be acquired and strategies for teaching and assessment have been developed. Also the strategies for learning and teaching for modernization and updating of program outcomes were addressed.



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2. The curriculum and courses development committee in the program concerns with reviewing of all courses contents to be sure that the adopted strategies of teaching and assessment are suitable for delivering of this contents to the students. Furthermore the revision of contents all over the courses prevent undesirable reduplication of taught subjects in different courses.
3. This committee also develops and modernizes curricula and courses to suit the rapidly and steady changing in the field of specialization and the constant changes and challenges in the local labor. market and overseas.
4. The capabilities and skills of the department members are continuously developed specially in the areas of their familiarity with different teaching and assessment strategies. This continuous training conducted through participation in workshops inside & outside the university related to quality assurance and application of its standards. They involve special courses on how to write courses and program specification and reports, as well as how to conduct and write a self-study report .

Areas requiring improvement:

1. Participation of all department members in special training courses concerned with quality assurance and accreditation inside and/or outside the university and the organization of these courses within the department in cooperation with the Deanship of university development and quality.
2. The ability to implement this program effectively (such as the provision of the right place suitable building, classrooms & laboratories and the qualified staff who deliver the program.

Priorities for action

1. Establishment of a consultation committee in the department whose members include academic personnel (from the department) and professionals (experts in the field of industry and labor market) as well as international experts from similar regional and international universities and programs for annually reviewing program specifications,



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- courses specifications, the learning outcomes of the program and all included courses (ILOs) and verifying the suitability of the teaching strategies and assessment methods conducted for achieving these ILOs.
2. Develop a plan for a benchmarking with similar national or international programs in order to determine the extent of the program level with programs that preceded us in accreditation.
 3. Develop a plan for getting independent opinion from specialists affiliated to other academic programs within the university to ascertain and verify the extent to which the process of program evaluation and development are practiced.

Subsection 4.3 Program Evaluation and Review Processes. Overall Rating 3 Stars (2.54)

The processes followed for program evaluation and review include:

1. Courses and programs are evaluated and reported on annually with information about the effectiveness of planned strategies and the extent to which intended learning outcomes are being achieved, evidenced by courses reports and program reports.
2. Quality indicators that include learning outcome measures are identified and used for all courses and the program as a whole.
3. The annual review of the program that was prepared by quality assurance and academic accreditation committee in the department. This report include evaluation of different courses in the program, program and courses ILOs and the extent to which they achieved ,quality of teaching ,statistical information about the results of different courses ,factors affecting completion and progression rates, internal and external changes affecting the program. It also provide summarization about the program evaluation based on graduating student evaluation and surveys, employer and stakeholder comment on skills of graduates, ,independent evaluators comments ,and other feedback and evaluation measures used to evaluate the quality of the program .After that the committee state its recommendation report that provide information on the most important strengths, weakness, suggestion for areas need improvements and action plan proposed and recommended for program development.
4. These reports then submitted to the department and faculty administrative board to take the



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- measures and approve the executive procedures that facilitate and providing the healthy academic environment for obtaining good quality in teaching and learning process.
5. Some amendments and improvement have already occurred as a result of identifying and detecting some emerged problems. These problems and obstacles discovered through the process of program and self study evaluation, student & graduates surveys and employers & field training supervisors' questionnaires. For examples:
 6. Changing the study plan to become more suitable for the international changes and the vast growth in knowledge in the area of specialization. In addition to become more interested in developing various skills to students to suit and fulfill the need of the local labor market and to ensure the quality of the graduate and ease of obtaining good jobs.
 7. There are continuous changes and modifications in the taught courses in terms of topics that are taught, teaching methods, evaluation procedures and formulation of course objectives and learning outcomes .These changes based on student surveys for taught courses and the reports of the various committees in the department concerned with reviewing of the courses specifications and their reports for developing and improving courses delivery.
 8. Continuous change and diversity in the use of extra-curricular activities and activating the role of the student in the learning process for the transition from the stage of negative reception of the information or skill from the lecturer to the stage of student positive participation in the process of acquisition of information. This, because the student should be the core of the process of teaching and learning.
 9. Some teaching staff are replaced by others who have more ability to effectively deliver and teaching certain courses for student. The decision of these replacements is based on the student surveys for different courses, success and repetition rates, student complaints and the distribution of grades in these courses. The department and the college administration board verify these complaints and carefully study these cases before the decision for the replacement process.
 10. Establishment of a consultation and advisory committee in the department whose members include academic personnel (from the department) and other universities as well as international experts from similar regional and international universities and programs It concerned with annually reviewing program specifications , courses specifications , the



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learning outcomes of the program and all included courses (ILOs) and verifying the suitability of the teaching strategies and assessment methods conducted for achieving these ILOs . it also provide recommendations and suggest corrective plans for development of quality of teaching and learning strategies.

11. Another measure, which is very essential in the processes followed for developing the program, is regular completion of the rating self evaluation scale for the program .It periodically(every three years) assess and monitor the extent to which the standards for quality assurance and accreditation according to NCAAA were applied and considered in the program. Based on this evaluation the weakened points are addresses and determined, corrective plan are designed then the action measures are scheduled to be worked on by executive team from the staff members.

Evaluation of program evaluation and review processes.

Summary of strengths.

- 1- Courses and programs are evaluated and reported on annually with information about the effectiveness of planned strategies and the extent to which intended learning outcomes are being achieved, evidenced by courses reports and program reports.
 - 2- Quality indicators that include learning outcome measures are identified and used for all courses and the program as a whole.
 - 3- Reports of the external examiners & evaluators committee and check marking committees that has been established for each course assessment referred to the consistency and compatibility of assessment methods with the learning forms used. They also indicated the ability of questions to measure all intended learning outcomes established and listed in the course specification in advance.
 - 4- Some amendments and improvement have already occurred as a result of identifying and detecting some emerged problems.
 - 5- Procedures are followed for ensuring the appropriateness of learning outcomes and the extent to which they are achieved gathered from students and graduates through surveys and interviews, discussions with teaching staff, and other stakeholders such as employers.
- Evidences included:

- ✓ Student surveys and their opinions and satisfaction about the program.



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- ✓ Graduate surveys and their opinions and satisfaction about the program.
- ✓ Employer surveys and their opinions and satisfaction about the outcomes of the program.
- ✓ Stakeholder surveys and their opinions and satisfaction about the outcomes of the program.

Areas requiring improvement:

Formulation of committee at the faculty level include the senior administrators and members from quality committees in different faculty departments for reviewing the annual program reports of all affiliated programs. This committee should prepare a report containing strengths & weaknesses for different programs and supportive means and mechanisms of faculty board and administration for each program. It also put a plan on how to solve problems and remove obstacles in order to achieve healthy academic teaching environment and how to accomplish all ILOs for different programs in a sound and appropriate quality of performance agreed with the visions, missions, objectives and values of the each program, faculty and university.

Priorities for action.

1. Develop a plan for a benchmarking with similar national or international programs in order to determine the extent of the program level with programs that preceded us in accreditation.
2. Develop a plan for getting independent opinion from specialists affiliated to other academic programs within the university to ascertain and verify the extent to which the process of program evaluation and development are practiced

Subsection 4.4 Student assessment. Overall Rating 3 Stars (3.1)

The strategies for student assessment in the program and the processes used to verify standards of student achievement include:

1. Courses Specifications in details and in a simple & brief form throughout the academic guide booklets were distributed and clearly communicated to students at the beginning of each semester. The course description includes overall view of the course requirement,



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- intended learning outcomes, teaching and learning strategy and assessment methodology used in the evaluation process.
2. Reports of the external examiners and evaluators committee, which has been established for each course assessment, about the consistency and compatibility of assessment methods with the learning forms used.
 3. Appropriate valid and reliable mechanisms were used for verifying standards of student achievement. They include:
 - ✓ Designing and formulating of reliable and objective questions by the department committee specially established for questions preparation for different offered courses
 - ✓ Using of the system of continuous assessment throughout the semester that does not depend only on the final assessment at the end of the semester
 - ✓ Reports of check marking committee for the theoretical exams consisting. This committee consists of faculty members from department of physics in addition to others from different programs in the faculty to ensure the validity of the checking process based on the model of answer provided by the faculty member responsible for the course.
 - ✓ Reports of external evaluators for the oral and practical exams. The committee consists of faculty members in addition to other academic or professional examiners from outside the department .They participate in the assessment of students and rating their grades to verify and add more credibility to the process of assessment and the level to which student achievement reached.
 - ✓ The existence of a well established grading system and standards adopted in the faculty regulations to determine levels and grades of students in the final exams and grade point average GPA for each semester and baccalaureate and how it calculated. These regulations are clearly declared for the student on the website of the faculty.
 - 4- Student surveys about the extent to which they satisfied with the process of marks check and grades they obtained

Evaluation of student assessment processes

Summary of strengths.



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- 1- It has been taken into consideration that student assessment mechanisms are appropriate for ILOs and the forms of learning sought for each course as described in its specification
- 2- Appropriate valid and reliable mechanisms are used for verifying standards of student achievement. Some measures used for this purpose include:
 - i. Check marking committee reports for the theoretical exams and their confirmation that the assessment and checking process is fair and objective.
 - ii. External evaluators committee reports for the oral and practical exams and their confirmation that the assessment and checking process is fair and objective.
- 3- Arrangements were made within the program for training of teaching staff in the theory and practice of student assessment. This achieved by participation of the staff in training courses organized by the university represented by the Deanship of university development and quality on this matter .For examples attendances of courses related to techniques for substantive questions construction and analysis of the results of exams at the level of the total score and the level of questions.
- 4- Feedback on performance and results of assessments are given promptly to students in each semester. Some of these procedures include:
 - ✓ Announcement of the results of periodic and semester exam for students through the bulletin board in the department to be informed with their results ,discuss them with staff for finding out the strengths and weaknesses in their performance
 - ✓ Student portfolio for each course which include models of different exams and grades obtained by students.
 - ✓ Announcement of the final results of either theoretical or practical exams at the university official website promptly after the completion of the checking process (within three days after the exam), based on the instructions of the faculty board.

Areas requiring improvement :

- 1- Encouragement and provision of opportunities for department members to attend specialized courses in this matter which organized by the university represented by the Deanship of university development and quality.



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- 2- Working to find out new ways and strategies for student assessment appropriate for the form of learning used which have the ability to measure the desired learning outcomes efficiently in every course.

Priorities for action.

- 1- Organization of symposium and workshops in the department by educational specialists and experts in the field of forms of teaching and different and modern ways for assessment. These courses aimed for staff training in these areas and for increase their teaching and educational experience and capabilities. They also assist teaching staff on how to select learning strategies appropriate for each course and assessment methods appropriate for the teaching methods used.
- 2- Develop a plan for a benchmarking with similar national or international programs in order to conduct comparison between the students achievement level in the program with those achieved by the students in similar accredited program in accordance with the standard approved by NCAAA .
- 3- Develop a plan for getting independent opinion from specialists affiliated to other academic programs within the university to ascertain and verify the mechanisms followed by the department to check the levels of student achievement .It also evaluate the realistic &credibility of the obtained grades and their consistency and compatibility with the level of achievement. These independent assessments are done through access to a course specification and student portfolio, reports of question formulation committee, reports of check marking committee, direct student meeting their marks and their satisfaction by their final grade.

Subsection 4.5 Educational Assistance for students. Overall Rating 3 Stars (3.46)

Summary of what assistance provided in relation to the matters listed in this sub-section of standard include:

- 1- Teaching staff are available at sufficient times for consultation and advice to student through a declared scheduled for office hours adopted in department councils. This matter has been proved by the minutes of the frequent meetings of staff members with students and also in accompanied attendance sheets for these meetings



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- 2- Teaching resources are sufficient to large extent to ensure achievement of the intended learning outcomes. This evidence by:
 - ✓ The availability of classrooms, staffing, seat, lighting, aeration and air conditioning and time table for their maintenance.
 - ✓ The availability of learning laboratories in the department which are will equipped with teaching and learning audio-visual aids.
 - ✓ The labs are also equipped with assessment equipment in sufficient number for student training.
 - ✓ The availability of teaching and learning aids such as and /or visual equipment, models, educational media and CDs and simulation tools.
 - ✓ The availability of the special field in the project.
 - ✓ The presence of the King Abdallah university library, Faculty of Science library and Physics departments library.
 - ✓ The university's subscription in many of well-known universal information bases and in many well reputed scientific sites and magazines in the field of specialization to provide an opportunity for students to see and use what is new in the physics field in their learning activates.
- 3- Some appropriate preparatory and orientation mechanisms are provided to prepare students for study in higher education environment as the preparatory year and the involved courses concerned with the education of English language and other learning skills.
- 4- Systems are in place within the program for monitoring and coordinating student workload such as:
 - ✓ Equally distribution of taught courses on the educational semesters. This matter in order to monitoring, equally distribute and coordinate the educational burdens or work load of the students through the different courses and semesters, as shown in the department study paln and its compliance with the minimum and maximum teaching units for each semester and each year as defined by the National Qualifications Framework.
 - ✓ The curriculum and courses development committee in the program periodically reviewed the taught topics in each course to avoid its duplication and subsequent increase in the student educational burdens (workload).



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- 5- Student surveys and their opinions and satisfaction about their workload.
- 6- Student portfolio for each course and the included learning and educational activities and assignments. These activities were continuously revised and evaluated by the department staff who provide students the feedback about their performance
 - ✓ Feedback on performance by students and results of assessments are given promptly to students.
 - ✓ Each student has his own university email address through which guidance and instructions from different university departments such as from department, college and deanship of student affairs have been sent to him.
 - ✓ The final results for all courses and some periodic courses have been declared for all students through their university sites. Students can access easily to know these results by using their passwords.

Evaluation of processes for educational assistance for students

Summary of strengths and evidences:

- 1- Teaching staff are available at sufficient times for consultation and advice to students through a declared scheduled for office hours adopted in department councils.
- 2- Teaching resources are sufficient to large extent to ensure achievement for the extended learning outcomes
- 3- The availability of classrooms, staffing, safety of seats, lighting, aeration and air conditioning and time table for their maintenance.
- 4- The availability of learning laboratories in the department which are well equipped with teaching and learning audio-visual aids
- 5- The labs are also well equipped with assessments and equipment in a sufficient numbers for student training. The maintain contracts for their safety and periodic follow up have been signed with a well-known companies in this fields.
- 6- The availability of teaching and learning aids such as audio and /or visual equipment, models, educational media and CDs and simulation tools.
- 7- The availability of the special field in the project.
- 8- The presence of the King Abdallah university library, Faculty of Science library and Physics departments library.



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- 9- The university's subscription in many of well-known universal information bases and in many well reputed scientific sites and magazines in the field of specialization to provide an opportunity for students to see and use what is new in the physics field in their learning activates.
- 10- Each student has his own university email address through which guidance and instructions from different university departments such as from department, college and deanship of student affairs have been sent to him.
- 11- The final results for all courses and some periodic courses have been declared for all students through their university sites. Students can access easily to know these results by using their passwords.

Areas requiring improvement:

- 1- Expansion in conducting awareness and familiarity workshops to all department member about services available in the faculty and university for students
- 2- Assigning reading room in the department, for students, supplied with computers connected to the internet and the information databases in a way that allow them privacy.
- 3- Recommendation from the department council to the faculty board to provide English language test that should be passed as essential requirement for admission to study the college and the program
- 4- Encourage students to attend extra courses specialized in learning English language, computer skills, learning skills, creative thought, communication skills, leadership and other skills. These activities should be added within extra-curricular activities where student who interested by them will be reward by additional marks or give him the opportunity to amend some of his bad marks semester activities.
- 5- Future plans for purchasing, renewing and maintenance of the labs equipment and signing maintenance contracts with good reputation and higher efficient companies.
- 6- Future plans for the purchase of educational books and other teaching aids as educational video. CDs and multimedia.

Priorities for actions



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- 1- Planning to set up a student follow up unit as a part of the graduates unit. So that each student joined to the department will have his own personal academic file that contains all his activities in different aspects of the university life, educational work, his annual reports on (moral, dealing, transaction, educational success and academic advancement) and his advantages and disadvantages. This file will be developed by department members who teach him in each year and made available to the student to see it and discuss its contents with academic staff to help and direct him and providing the guidance, advice and assistance to him, especially who face difficulties in various learning, teaching and social and other aspects. By this way, there will be a file for each graduate from the beginning of his joining the program, following up his career advancement and positions he held.
- 2- Planning to set up additional intensive lectures at the end of each semester for each course through which there will be a summary of what has been taught and re-explanation of some mystery points and subjects in the course based on the need and recommendation of the students to ensure their comprehensive understanding and their ability to apply and demonstrate what they have learnt.
- 3- Establishment of a unit in the department and college under the name of students preparation unit. Through which, students will be prepared for university education by introducing lectures, workshops and symposiums discussing and explaining different subjects and issues related to and improving student learning skills.
- 4- Activating the process of communication between department members and students' in the educational and academic affairs through the university website and e-mail

Subsection 4.6 Quality of Teaching. Overall Rating 3 Stars (2.9)

Summary about the planning of teaching strategies to develop the intended learning outcomes (ILOs) of the program, for evaluating quality of teaching, and processes for preparation and consideration of course and program reports .These measures include :



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- 1- Every member responsible for teaching certain course at the beginning of each semester prepare the course specification that include course identification and general information about it , requirement of the course ,course objectives and ILOs , course contents ,teaching strategies to be used to develop ILOs , methods of assessment, schedule of assessment tasks for students during the semester, arrangements for availability of teaching staff for individual student consultations and academic advice, learning resources and recommended books and reference material, facilities required and finally course evaluation and improvement processes . The evaluation process for the courses includes strategies for obtaining student feedback on effectiveness of teaching, processes for improvement of teaching, processes for verifying standards of student achievement and the planning arrangements for periodically reviewing course effectiveness and planning for improvement.
- 2- Every member responsible for teaching certain course at the end of each semester prepare the course report that includes summary of course delivery ,the topics covered , topics not fully covered and the reason and consequence of this matter , summary about the effectiveness of planned teaching strategies for intended learning outcomes set out in the course specification and difficulties experienced in using the strategy and suggested action to deal with those difficulties. It also involves number of students starting & completing the course, distribution of their grades , any factor affecting the results, variations from planned student assessment processes, verification of standards of achievement , difficulties experienced for student learning in the course and their consequences and organizational or administrative difficulties encountered and their consequences Furthermore report include course evaluation , student evaluation of the course, list by the most important criticisms and strengths, response of instructor or course team to this evaluation and the proposed corrective and action plan for improvement .
- 3- The effectiveness of different planned teaching strategies in achieving learning outcomes in different domains of learning is regularly reviewed and adjustments are made in response to evidences about their effectiveness, evidenced by
 - ✓ Reports of the curriculum and courses development committee in the program and also reports of the consultation committee in the department which make sure of the effectiveness of different planned teaching strategies in achieving learning outcomes in



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different domains of learning for the different taught courses and teaching methods that are used to teach these courses.

- ✓ Courses reports and what have been mentioned, in light of the availability of evidences and proofs, about the adjustments that have been taken for the confirmation for the effectiveness of different planned teaching strategies in achieving learning outcomes in different domains of learning for the different taught courses and teaching methods that are used to teach these courses. In addition to the application of these adjustments in the course specification for next semester.
- 4- At the end of each semesters curriculum and courses development committee in the program carefully study and precisely review the courses reports with their pre-set specifications and prepare a comprehensive report .This report include contents of each courses ,the topics that have not been taught and the reasons for this , difficulties and problems encountered during teaching various courses and the recommended corrective and action plan for future improvement .This report finally submitted to the department and faculty administrative board to review it , take a corrective measures and set up the appropriate plans and mechanisms to overcome these problems and difficulties in the following academic years.
- 5- Students are fully informed about courses requirements in advance through course specifications and the academic guide booklet distributed for students at the beginning of each semester. These courses specifications contain a full description of the requirements of courses, knowledge& skills to be developed , intended learning outcomes and work requirements and assessment processes.
- 6- Attendance of department staff (new and continuing staff) in training courses on how to formulate learning outcomes and teaching & assessment strategies most appropriate for their achievement. For example the university teacher preparation training course that was organized by deanship of university development and quality
- 7- Results of student surveys and their opinions & satisfactions about the quality of teaching for different courses offered in the program.
- 8- Student academic rules and regulations which clearly stated the attendance requirements for various courses and the absence percentage that lead to deprivation from final exam performance .



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Almost 80% of teaching staff in the program were regularly assessed in student surveys

Evaluation of processes of quality of teaching.

Summary of strengths and evidences.

- 1- The strategies of teaching and assessment set out in program and course specifications are followed by teaching staff with flexibility to respond to the needs of different groups of students, evidenced by:
 - ✓ Courses reports and their comparison with courses and program specifications.
 - ✓ Reports of the curriculum and courses development committee in the program and also reports of the consultation committee in the department which confirm the commitment of teaching staff by the strategies of teaching and assessment set out in program and course specifications.
- 2- Students are fully informed about courses requirements in advance through course specifications and the academic guide booklet distributed for students at the beginning of each semester. These courses specifications contain a full description of the requirements of courses, knowledge & skills to be developed intended learning outcomes and , work requirements and assessment processes.
- 3- Textbooks and reference material are up to date and incorporate the latest developments in the field of theoretical and experimental physics, evidenced by reports of the curriculum and courses development committee in the program which revise the textbooks and reference recommended for each course to make sure that these teaching materials are modern ,recent and up to date .
- 4- Attendance requirements are made clear to students and compliance with these requirements is monitored and enforced, evidenced by attendance and absence sheets.
- 5- Statement of the number of work-shops in the area of quality of teaching attended by department staff to improve their performance in this area.
- 6- Student academic rules and regulations which clearly stated the attendance requirements for various courses and the absence percentage that lead to deprivation from final exam performance .



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Areas requiring improvement:

- 1- Expansion in the organization of training course for all staff about quality of teaching and the ways for its achievement and application in the university teaching .
- 2- Future plan for posting and announcement of detailed information about all course requirements in advance in the university website so that, all students in the department and who wishing to joining the department from outside the university can access to such information readily and easily.

Priorities for action.

- 1- Preparation of statistical statement by numbers of books recommended and used in teaching courses and their publication year.
- 2- Develop a plan for a benchmarking with similar national or international programs in order to confirm the effectiveness of teaching and assessment strategies used for achievement of pre-planned ILOs

Summary of data from student surveys that have been used for course and overall program evaluations:

I : Curriculum Evaluation

A) The Theoretical Part:

- 1- The clarity of the course aim and intended learning outcomes since the beginning of the semester.
- 2- The number of the theoretical hours of the course.
- 3- The harmony between the theoretical and the practical parts of the course.
- 4- The availability of the courses' scientific references.
- 5- The effectiveness of the scientific references in understanding the course.
- 6- The suitability between the scientific references and the explained material in the course.
- 7- The updated references of the course.



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- 8- Following the curriculum's time schedule throughout the semester.
- 9- The suitability between the curriculum material and the actual studying weeks.

B) The Practical Part:

- 1- The number of hours given to the practical practice.
- 2- The compliance of the assisting staff to the practical classes time .
- 3- The lecture's acceptance of the students' questions and needs for repetition as well as his interest in effective discussions.
- 4- The efficiency of the practical practice in understanding the theoretical part of the course.
- 5- The cooperation and interaction between the teaching staff and assistant staff in practicing the practical part.

C)The project

- 1- The availability of the works given for project.
- 2- The institution's worker acceptance and cooperation with the students.
- 3- The suitability of the places designed for the project.
- 4- The availability, effectiveness and supervising ability of the supervisors in the project
- 5- The availability of sufficient staff enough to supervise students' group during a the project.
- 6- The availability of teaching classes or places that could accommodate students in the project.

II: The Teaching Staff

- 1- The teaching staffs compliance to the specific time given for lectures.
- 2- The teaching staffs knowledge and awareness of the course being taught
- 3- The teaching staffs interest and care for students to learn
- 4- The usage of demonstrations and learning aids by the teaching staff.
- 5- The clarity of the teaching staff in illustrating the scientific part of the curriculum.
- 6- The teaching staff ability to direct and control the lecture.
- 7- The quality of organizing the course contents and following it up through the academic year by the teaching staff



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- 8- The encouragement given to the students by the teaching staff to participate and
- 9- interact in the lectures as well as to do research in the subjects given.
- 10- The teaching staffs compliance to use the whole lectures' time for explaining the decided part of the course.
- 11- The availability of the teaching staff during their office hours to answer students'
- 12- inquiries and the benefit of that on you as a student,
- 13- The appearance and tidiness of the teaching staff
- 14- Comparing the staff you have been taught by, how do you evaluate the teacher of this course.

III: Educational Environment and Resources

- 1- The availability of lectures auditoriums.
- 2- The suitability of the auditoriums and laboratories in terms of space, ventilation, light and its ability to accommodate the groups of students in each session.
- 3- The availability of the new demonstration materials whether audio, visual or T.V screens.
- 4- The availability of new equipment and materials in the laboratories.
- 5- The suitability of the library working hours to the students' needs.
- 6- The availability of enough resources books in the library for each course as well as the easiness to access them.
- 7- The availability of the training service.

IV: Students' Evaluation Methods (mid-term and Final exams)

- 1- The variety of the semester evaluation(quizzes, tests, assignments, researches,....,etc)
- 2- The suitability of the methods used by the teaching staff to evaluate the students' performance.
- 3- The availability of enough time to the students to prepare for the final exams.
- 4- The suitability of the methods used in giving marks and the students awareness of their tests results as well as their ability to discuss them with the staff.
- 5- The clarity of the final exam's questions.
- 6- The clarity of the final exam questions to the whole curriculum.
- 7- The variety of the question types(multiple choice-essays,... etc)



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- 8- The difficulty of the final questions.
- 9- How do you evaluate the final exams as an evaluating methods.

The positive aspects in the educational process.

Any suggestions or ideas student wants to add (things were not mentioned in the questioner).

Some negative point encountered in the educational process:

- 1- Topics that are taught were too many in some courses .
- 2- Teaching strategies used in some courses were not appropriate and need improvement.
- 3- Exams in some courses were difficult and mysterious.
- 4- Dealing of some staff with student was not appropriate.
- 5- Lecturers in some courses were not able to clearly and easily deliver knowledge and skills to students .
- 6- Some courses need more prerequisites courses before their offering.
- 7- Some recommended textbooks and references were difficult and their writing style were complex.

Subsection 4.7 Support for improvements in Quality of Teaching. Overall Rating 3 Stars (3)

Strategies for improvements the quality of teaching includes:

1. The effectiveness of the quality of teaching is regularly reviewed and adjustments are made in response to evidence about their effectiveness, evidenced by:
 - ✓ Courses reports and what have been mentioned, in light of the availability of evidences and proofs, about the adjustments have been taken for the confirmation of the quality of teaching, teaching effectiveness of various planned teaching strategies in achieving learning outcomes in different domains for the different taught courses ,teaching methods that are used to teach these courses and difficulties experienced in using the teaching strategies and suggested action to deal with those difficulties. They also include quality of teaching evaluation, student evaluation for the quality of teaching verification of standards of achievement, list by the most



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important criticisms and strengths, response of instructor or course team to this evaluation and the proposed corrective and action plan for improvement quality of teaching.

- ✓ Reports of the curriculum and courses development committee in the program and also reports of the consultation committee in the department which make sure of the effectiveness and the quality of planned teaching strategies in achieving learning outcomes in different domains of learning for the different taught courses and teaching methods that are used to teach these courses.
 - ✓ The effectiveness of teaching is evaluated by seeking evidence about how much students have learned and modifying approaches accordingly.
2. At the end of each semesters curriculum and courses development committee in the program carefully study and precisely review the courses reports with their pre—set specifications and prepare a comprehensive report. This report include contents of each courses ,the topics that have not been taught and the reasons for this , difficulties and problems encountered during teaching various courses and the recommended corrective and action plan for future improvement of teaching quality .This report finally submitted to the department and faculty administrative board to review it , take a corrective measures and set up the appropriate plans and mechanisms to overcome these problems and difficulties in the next academic years.
 3. Attendance of the department staff in programs and training courses in teaching skills, which are organized by the dean of university development and quality in UQU. The extent to which teaching staff are involved in professional development to improve quality of teaching is monitored.
 4. Attendance of the department staff in programs and training courses aimed to use new and advanced technologies in the field of education. These workshops were organized by the deanship of university development and quality, deanship of information technology and deanship of E & distance learning (such as active learning — cooperative learning& - E-learning).
 5. Formal recognition is given to outstanding teaching; with encouragement given for innovation and creativity for ail staff in the faculty and department.



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6. Provision of financial incentives for faculty members under the name of excellence rewards .One standard of the criteria selected for this reward is the member attendance and participation in the activities of academic development and improvement of quality of teaching.
7. The availability of various learning materials necessary for different learning strategies in the department. They contribute in improving the quality of teaching and activating the process of teaching and learning to ensure the achievement of ILOs, for example:
 - a) Utilization of different educational tools in classrooms, laboratories, such as modern and advanced audio visual tools according to what has been mentioned in the specification for each course.
 - b) Classrooms were provided with modern teaching aids to assist in the acquisition of knowledge and facilitate the learning process.
 - c) Laboratories were quantitatively and qualitatively provided with modern and advanced instruments and equipment to enable students to improve their practical and psychomotor skills.
 - d) Classrooms can be reorganized according to the nature of teaching activity in order to suit different strategies and methods of teaching and learning appropriate for each taught subject. For example, seats can be organized to suit a lecture mode of teaching, to become suitable to form discussion groups and also can be reorganized for other various modern moods, types and methods of teaching and learning
 - e) The presence of models, educational media (videotapes & CDs) and simulation tools to assist & support students in the learning process and the acquisition of different skills and knowledge.
 - f) Model open-mindedness and flexibility by demonstrating that when you have new information, you sometimes change your mind or adjust your plans and that there may be more than one way to do things or to solve problems

Evaluation of arrangements for supporting improvements in quality of teaching

The evidences about teaching quality:

Department of Physics / Self-Study Report (SSRP) 2014/2015



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1. Courses reports and what have been mentioned in them about the quality of teaching and suggested plan for improving quality of teaching.
2. Program report and what have been stated in them about the quality of teaching and future plan for improving quality of teaching.
3. Reports of the curriculum and courses development committee in the program and also reports of the consultation committee in the department about the quality of teaching of the program and the recommendation for further improvement of this quality.
4. Positive feedback on the quality of teaching got front the students and graduates surveys and their opinions & satisfactions about the quality of teaching for different courses offered in the program .Also the points they suggested, recommended and stressed on for improving and supporting the quality of teaching.
5. Certificates of attendance of the department staff in programs and training courses in teaching skills, which are organized by the dean of university development and quality in UQU.
6. Certificates of attendance of the department staff in programs and training courses aimed to use new and advanced technologies in the field of education, which are organized by die deanship of university development and quality ,deanship of information technology and deanship of E & distance learning (such as active learning — cooperative learning & - E-learning)

Summary of strengths

1. Training programs in teaching skills are provided within the Umm Al Qura University and Faculty of Applied Sciences for both new and continuing teaching staff.
2. Training programs in teaching include effective use of new technologies as electronic learning and active learning.
3. Format recognition is given to outstanding teaching, with encouragement given for innovation and creativity for all staff in the faculty and department.
4. Provision of moral and financial incentives for faculty members under the name of excellence rewards. Some criteria selected for this reward are the member



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attendance and participation in the activities of academic development & improvement of quality of teaching and outstanding teaching performance.

5. The availability of various learning materials necessary for different learning strategies in the department. They contribute in improving the quality of teaching and activating the process of teaching and learning to ensure the achievement of ILOs.

Areas requiring improvement:

1. Future plans for the purchase, renewing and maintenance of the equipment and signing maintenance contracts with a good reputation and high efficient companies.
2. Future plans for the purchase of updated and advanced educational ,therapeutic and research equipment and also recent books and other teaching aids as educational video, CDs ,multimedia and models to facilitate the process of learning and delivering of knowledge This plane should be systematic ,well studied and including The implementation, execution and procurement priorities.
3. Setting —up a future plans to provide classrooms and laboratories with the recent and advanced audio and video teaching aids.

Priorities for action

1. Encouragement and provision opportunities for department members to attend specialized courses in the area of improvement of quality of teaching which organized by the university represented by the Deanship of university development and quality.
2. Organizing more training courses in the area of modern strategies and skills of teaching within the department & college by inviting experts and specialists to give lectures and workshops to allow a largest number of faculty members to attend these meetings and benefit from training.
3. Co-ordinate and support effective transfer of good practice, working closely with the inspectorate to ensure that it is disseminated effectively, and that there are clear messages to the system about what constitutes excellence.



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4. Develop further its web based Teaching and Learning Communities portal to provide online resources and case studies to support and facilitate the exchange of good practice in teaching, training and learning

Subsection 4.8 : Qualification and Experience of Teaching Staff. Overall Rating 3 Stars (3.2)

1. Comment on qualification and experience of teaching staff relating to program requirements includes:
2. Teaching staff have the appropriate qualifications and experiences for teaching the courses that they teach.
3. All the members teaching staff are working a full-time.
4. All members of the department staff have good moral character and reputation, scientific and practical efficiency and working with the spirit of teamwork. This is evidenced by the appreciation of the faculty board for the department staff and the positive feedback from the student report in course surveys.
5. 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.
6. The academic staff in the department have a high degree of professionalism, experience and high skilled in the general and specific area of specialization.
7. Ratio of the number of courses taught by staff of the department, who is working full-time, to that taught by members from outside the department, indicates that the percentage is 100%.
8. Attendance of all department staff continuously in the scientific activities (conferences, seminars, workshop, scientific meeting, and symposium), which makes them up to date with the latest developments in their fields which in turn is reflected on their teaching capabilities and involve their student in learning that incorporates those developments and make them at the same standard of skill, experts, knowledge with their peers worldwide.



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9. Attendance and participation of the department staff in various scientific events in the field of specialization which indicate their participation either by delivering lectures, workshops or introducing and presenting research papers they have conducted.
- ✓ Most of the department staff members participate in research activities in the field of study they teach and also involve their students in these activities evidenced by:-
 - ✓ Statement of number of research projects obtained by the department staff (in the areas of specialization) funded by government research establishments and institutes from both inside and outside the university as well as non-funded research projects.
 - ✓ Amount of funding allocated for research projects and the names of supportive funders and donors.
 - ✓ The number of published papers in well reputed and highly ranked periodicals and magazines.

List of teaching staff in the program sorted by the Academic position and degree (Alphabetical).

No.	Name	Academic position	Academic degree
1.	Ameena Naif Mohammad Al Ahmadi	Assistant Professor *	Ph.D.
2.	AbdulAziz Mohammad Sedeeq Saeed Kutb	Professor (Full) *	Ph.D.
3.	Issam Hamed Mohammad Al Ahdali	Professor (Full) *	Ph.D.
4.	Fayz Hmad Hmood Al-Ghorabie	Professor (Full) *	Ph.D.
5.	Khaled Abdul Waged Mohamad Abdul Lateef	Professor (Full) *	Ph.D.
6.	Roshdi Seoudi Mohamed Awed	Professor (Full) *	Ph.D.
7.	Samer Solyman Ahmad Neto	Professor (Full) *	Ph.D.
8.	Saud Hameed Ahmad Al Ahyani	Professor (Full) *	Ph.D.
9.	Yosry Mohamad Eid Moustafa	Professor (Full) *	Ph.D.
10.	Abdul Aziz Rashad Soroogi	Associate Professor*	Ph.D.
11.	Adel Mohamad Hashemi Madani	Associate Professor*	Ph.D.



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12.	Ahmad Mohamad El_Hady Abdel_Ghafar Abdul_Attia	Associate Professor*	Ph.D.
13.	Mufeed Mahmoud Hussein Al-Maghrabi	Associate Professor*	Ph.D.
14.	Mohamed Mahmoud Sabry Salah El_Din Mohamed	Associate Professor*	Ph.D.
15.	Said Mohamad Mohamad Attia	Associate Professor*	Ph.D.
16.	Solyman hamd Mosalam Al_Mosalam	Associate Professor*	Ph.D.
17.	Waleed Gameel Ahmad Altaf	Associate Professor*	Ph.D.
18.	Abdel Rahman y. Lashin	Assistant Professor*	Ph.D.
19.	Abdul_Mageed Omr Ali Taymomi	Assistant Professor*	Ph.D.
20.	Afaf Moawad Abdul_Mageed Ali	Assistant Professor*	Ph.D.
21.	Ahmad Yosef Ahmad bargawi	Assistant Professor*	Ph.D.
22.	Al_Hoseeny Al_Taher Mahdy Mohamad	Assistant Professor*	Ph.D.
23.	Mongi Sassi Amor Ben Moussa	Assistant Professor*	Ph.D.
24.	Ayda Radwan Tolbah Ebraheem	Assistant Professor*	Ph.D.
25.	Doaa Abd Allah Said Mahmoud	Assistant Professor*	Ph.D.
26.	Esam Abdullah Abdul_Rahman Al_Afrag	Assistant Professor*	Ph.D.
27.	Fatema Al_said Mahroos Othman	Assistant Professor*	Ph.D.
28.	Galal El_Naser El_Hady Al_Wafalyi	Assistant Professor*	Ph.D.
29.	Hanan Hosein Ebrahim Amer	Assistant Professor*	Ph.D.
30.	Hosam Salah El_Deen Mohamad Ebraheem	Assistant Professor*	Ph.D.
31.	Maha Mohamad Omr Khayat	Assistant Professor*	Ph.D.
32.	Mehrez Al_Cheriani Mohamed Loulou	Assistant Professor*	Ph.D.
33.	Mohamad Abdul_Hakeem Yonis Bokhari	Assistant Professor*	Ph.D.
34.	Mohamad Omar Mohamad Boustimi	Assistant Professor*	Ph.D.
35.	Mohammed Khalil Mohammed Al Turkestani	Assistant Professor*	Ph.D.
36.	Mohamad Omar Mohamad Babteen	Assistant Professor*	Ph.D.
37.	Ramadan Ali Hassan Ali	Assistant Professor*	Ph.D.
38.	Saif El_Esam Abdul_Salam	Assistant Professor*	Ph.D.
39.	Taha Mohamad Taha Al_Fawaal	Assistant Professor*	Ph.D.



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40.	Tasneem Malak Mohamad Deen Azeem	Assistant Professor*	Ph.D.
41.	Walid Belkacem El_Akreimi Belhadj	Assistant Professor*	Ph.D.
42.	Effat Abdul_Allah Ali Ali Rashed	Lecturer	M.Sc
43.	Hend Abdul_Aziz Ahmad Al_Hagagi	Lecturer	M.Sc.
44.	Turky Othman Hameed Al_Maatani	Lecturer	M.Sc.
45.	Fayza Abdul_Kader Hasan Agag	Lecturer	M.Sc.
46.	Hoda Gowybr Aneez Al_Salmi	Lecturer	M.Sc.
47.	Khaled Ali Mohamad Maghrabi	Lecturer	M.Sc.
48.	Mohamad Owaid Fahd Al_Omary	Lecturer	M.Sc.
49.	Noha Farag Mohamad Abdullah Al_Harbi	Lecturer	M.Sc.
50.	Rabab Khaled Mohamad Sendi	Lecturer	M.Sc.
51.	Abeer Ahmad Abdullah Al_Sreehi	Domenstrator	B.Sc
52.	Abdul_Rahman Masood Daif Allah Al_Oteebi	Domenstrator	B.Sc
53.	Ahmad Makbool Mohamad Hekami	Domenstrator	B.Sc
54.	Ali Saleh Aal_Sharaa Al_Shamrani	Domenstrator	B.Sc
55.	Anas Alaa Asad Mohder	Domenstrator	B.Sc
56.	Arwa Muhammad Abdul Hakeem Bukhari	Domenstrator	B.Sc
57.	Asmhan Saud Ali Al_Shekhi	Domenstrator	B.Sc
58.	Balsam Fahd Ebraheem Soofi	Domenstrator	B.Sc
59.	Danya Abdul_Rehem Meki Sendi	Domenstrator	B.Sc
60.	Dawood Bin Abu_Bakr Bin Moosa Watrah	Domenstrator	B.Sc
61.	Ebthal Mastoor Khedr Al_Thebei	Domenstrator	B.Sc
62.	Eman Abdul_Baset Gaber Madkhli	Domenstrator	B.Sc
63.	Eman Saleh Awad Rokaan	Domenstrator	B.Sc
64.	Eman Ahmad Abdul_Raheem Bokhari	Domenstrator	B.Sc
65.	Fahd Abdullah Shokr Al_Hashemi	Domenstrator	B.Sc
66.	Fawzya Mohamad Mokhtar Turkestani	Domenstrator	B.Sc
67.	Hanan Hasan Al_Maklawi	Domenstrator	B.Sc
68.	Hoda Ahmad Abdullah Al_Allawi	Domenstrator	B.Sc



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69.	Manal Hosein Omr Khard	Domenstrator	B.Sc
70.	Mashaal Saud Hager Al_Harbi	Domenstrator	B.Sc
71.	Mohamad Abdul_Aziz Mohamad Sedeeq Kutb	Domenstrator	B.Sc
72.	Nada Abdul_Raheem Sedeeq	Domenstrator	B.Sc
73.	Noor Mahmud Mohamad Abdullah Basafr	Domenstrator	B.Sc
74.	Omaima Abdul_llah Abdul_Raheem Bawazeer	Domenstrator	B.Sc
75.	Saleh Marzook Berki Al_Lokmani	Demonstrator	B.Sc
76.	Samr Mohamad Sadoon Al_Selmi	Domenstrator	B.Sc
77.	Thamer Salman Faleh Al_Omeery	Domenstrator	B.Sc

*Indicates that the courses taught by the staff member are within the field of his advanced study.

Evaluation of qualifications and experience of teaching staff.

Evidence of qualification and experience of teaching staff

1. Curriculum Vitae of all department staff and the accompanied certificate and documents
2. Certificate of appreciation for department members from various professional and academic institutions and places inside or outside the university (internationally, regionally and nationally).
3. All members of the department staff have good moral character and reputation, scientific and practical efficiency and working with the spirit of teamwork evidenced by the appreciation of the faculty board for the department staff and the positive feedback from the student report in course surveys.
4. Certificate of attendance and participation of department staff in various scientific events in the field of specialization which indicate their participation either by delivering lectures, workshops or introducing and presenting research papers they have conducted.



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5. Most of the department staff members participate in research activities in the field of study they teach and also involve their students in these activities evidenced by:-
- ✓ Statement of number of research projects obtained by the department staff (in the areas of specialization) funded by government research establishments and institutes from both inside and outside the university as well as non-funded research projects.
 - ✓ Amount of funding allocated for research projects and the names of supportive funders and donors.
 - ✓ The number of published paper in well reputed and highly ranked periodicals magazines.
 - ✓ The number of students research projects supervised by department staff.

Summary of strengths.

- Teaching staff members have appropriate qualifications and experience for the courses they teach.
- Most of teaching staff members are working full-time.
- All members of the department staff have good moral character and reputation, scientific and practical efficiency and working with the spirit of teamwork evidenced by the appreciation of the faculty board for the department staff and the positive feedback from the student report in course surveys.
- Ratio of the number of courses taught by full-time staff to that taught by members from outside the department is over 80%.
- Most members of the department staff participate in research activities in the fields of study they teach and also involve their students in these activities.

Area requiring improvement

1. Planning to attract more staff members distinct scientifically, professionally and academically, highly experienced and skilled and highly reputed to join the department staff for further upgrading and improving of the department in all areas.



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2. Planning to attract and contract with international experts in the area of specialization to supervise the scientific research run in the department, training of scientific researchers and cadres and publishing the research products in well reputed and highly ranked periodicals and magazines.
3. planning to establish partnership and contract with well-known international scientific institutes experts in the area of specialization to exchange of experiences, transfer modern technology and preparing trained and qualified cadres in the department.

Priorities for action

Planning to organize periodical scientific meetings and annual conferences of the department and to invite of experts (internationally regional and nationally) in various areas of the field of specializations to provide the newest and up to dates in the area of specialization by providing lecture and training through specialized workshop.

Subsection 4.9 : Field Experience Activities. (Overall rating NA Stars)

In programs that includes field experience activate, the field experience activities must be planned and administered as fully integrated components of the program, with learning outcomes specified, supervising staff considered as members of teaching teams, and appropriate evaluation and course improvement strategies carried out. (Field experience includes any work based activity such as internships, cooperative training, practicums or other activities in a work under the supervision of staff employed in that work or professional setting)

There is no Field Experience Activities arrangements have been established with other company or institution to assist with the planning and or delivery of the program at the Department:

The field experience activity is very important to be applied in our department in order to:

- 1- The students to be ready participate the scientific meetings or lectures and they give opportunity to reflect the theoretical studies with the experimental in similar contexts.



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- 2- The supervisors members in student assessment and supervisors members in field experience identify and explain the evaluation criteria clearly and effective measures for bridging the differences in views.
- 3- Field experience activity evaluate by students and supervisors of field location and faculty member,
- 4- The evaluates will be taken in consideration when planning the following activities in the field.
- 5- Supervisors in the field activity provide with the clear information and handouts to be fully aware of the role and also aware of the relationship between activity and the program as a whole
- 6- Students provide with descriptive information, clear up be ready to participate in field experience and are chosen places field experience as their capacity to develop learning outcomes required
- 7- The evaluate of the places taken in consideration when field activities applied to development the outputs in the programs.
- 8- The expected knowledge and skills learned specify clearly by students through their field experience and take the necessary steps to ensure that the learning outcomes and expected development of expertise understandable to both students and their supervisors

After Activate this subsection Priorities for Improvements

- 1- Set up for field activities will be include careful assessment of the risks of any student or supervisors, including planning to reduce the risk of exposure, and the ways to deal with them if they occur
- 2- Work and organizing meetings after field activity or lectures to give the students the opportunity to reflect with experience in the field of similar contexts
- 3- The physics department evaluate the field activities by students, supervisors, and faculty members in the department, to ensure that the results of this assessment are taken into account in the planning of field activities.
- 4- The evaluation criteria should be clearly, in those cases involving supervisors signed with members of field activity in student assessment and supervisor in the physics departments to explaining the standards evaluation of students.



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- 5- Provide supervisors in field locations with clear information and handouts to be fully aware of their role and are aware also of the relationship between activity and the program as a whole.
- 6- Providing the students by the information that they need bright in the nature of the work and the relationship with the field activity
- 7- Choose field experience as capacity of these places on the development of the learning outcomes and assess the effectiveness of these places in the development of these outputs
- 8- Specify clearly the expected knowledge and skills learned by students through their field experience and take the necessary steps to ensure that the learning outcomes and expected development of expertise understandable to both students and their supervisors

Subsection 4.10 : Partnership Arrangements with Other Institutions (it these exist) (Overall rating NA Stars)

There is no partnerships arrangements have been established with other institution to assist with the planning and or delivery of the program at the Department:

- ✓ Teaching staff in physics department do not visit and participate other physics departments regularly to consult on the details of courses and evaluation criteria and there is no discussion and courses requirements.
- ✓ There are no arrangements for the correct work of the students include students from the other departments involved in accreditation or by local departments. There is no specify clearly the responsibilities of local departments and responsibilities organization participating in formal agreements governed by the laws of the Kingdom of Saudi Arabic.

In order to activate this subsection it must do the following:

1. Official twinning agreements, cooperation and participation at the local and international department of physics that applicable laws of the United Kingdom of Saudi Arabic with identifying the responsibilities of the parties involved.
2. Follow-up on twinning and cooperation activities and participate regularly.
3. Discussion and consultation on courses and requirements effectively and make arrangements for consultation about the developments.

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4. The members staff, who have knowledge of the specific level of courses, should be visit regularly the other departments to consult on the details of courses and evaluation criteria.
5. Arrangements include correcting the students by participating departments in addition to corrected in the departments , so the final results is completed without delay and results will be available to students in the early time of the completion of the students requirements
6. If the program is provided by the departments of physics from outside the university, it must make sure that the courses, assignments and exams are amended to conform to the local environment and avoid using slang terms using as examples to illustrations that not match with the environment in which the program is offered.
7. Work programmes and courses are compatible with the requirements of the qualifications framework Arabic Saudi Arabia

After Activate this subsection Priorities for Improvements

1. Establishment the management of domestic and international cooperation and set up an integrated implementation regulations include all related and of signing with similar departments universities based on the cooperation between Saudi Arabia and friendly Countries and States.
2. Activate in the notes of joint cooperation programmes that agreements clearly define the responsibilities of the organization and responsibilities of the organization participate in the formal agreements under the laws of the Kingdom of Saudi Arabia.
3. The management should be develop the regulation describes the process of engagement with external institutions.
4. Establish the roles for evaluating the effectiveness of twinning, cooperation and participation regularly include questionnaires, analytical forms for application of both sides.
5. The agreements should be include regular meetings to ensure effective discussion and consultation courses requirement with a mechanism to communicate constantly to discuss the recent developments.



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6. The agreement should include the visits of members staff in the participating institutions, who have knowledge of the specific level of courses, to the Foundation regularly to consult on the details of courses and evaluation criteria

Standard 5 Student Administration and Support Services Overall Rating * Stares (3.36)**

Admission processes must be efficient, fair, and responsive to needs of students entering the program. Clear information about program requirement and criteria for admission and program competition must be readily available for prospective students and when required at a later stages during the program. Mechanism for student appeals and dispute resolution must be clearly described made known and fairly administered. Career advice must be provided in relation to occupations related to the field of student dealt with in the program.

Explanatory report about this standard

- 1- The student admission requirements are consistently and fairly applied to all students.
- 2- Rules governing admission with the credit for previous studies are clearly specified.
- 3- Complete information about the program, including the of courses, program requirements, costs, services and other relevant information is policy available to potential students and families prior to applications for admission.



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- 4- An effective student support system is available to identify students in difficulty and provide help with personal, student related, financial, family, psychological or health problems.
- 5- Policies and procedures are placed in order to ensure that resource materials and services needed to support student learning are adequate and appropriate for the program, regularly evaluated, and kept up to data as required.
- 6- Automated procedures are in place for monitoring student progress throughout their programs.
- 7- Procedures have been developed to ensure that students are protected against subsequent punitive actions or discrimination following consideration of a grievance or appeal.

Evaluation of student administration arrangements and support services for students in the program.

The evidence obtained for ensuring the quality of mission and objectives:

- 1- The statistical analysis and interpretation of students results explores the quality of student administration and support services according to student's needs.
- 2- The acceptable time the decision-making process takes for accepting students and results, and the low student appeals rates beside the short time taken to declare the results of students appeals procedures.
- 3- Visits reports to sites of student services and the discussions that done with students and staff.
- 4- Statement that clarifies the student that participating in extracurricular activities and their percentage in relation to the total students.
- 5- The quota allocated to student financial services in relation to total operating expenses.
- 6- Reports from the Dean of Student Affairs, which describes the number of case that received disciplinary action.
- 7- The reports from Dean of Student Affairs that clarify the number of cases where students were appealing against disciplinary decisions.

Summary of strengths.



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- 1- The admission processes are efficient, fair, and responsive to the needs of students entering the program.
- 2- Clear information about program requirements and criteria for admission and program completion is readily available.
- 3- Mechanisms for student appeals and dispute resolution are clearly described, made known, and fairly administered. Procedures have been developed to ensure that students are protected against subsequent punitive actions or discrimination following consideration of a grievance or appeal.
- 4- Career advice is provided in relation to occupations related to the fields of study dealt within the program through the declared office hours of the teaching staff.
- 5- Automated and privacy procedures are in place for monitoring student progress throughout their programs.
- 6- Clear rules are established maintained governing privacy of information and controlling access to individual student records.
- 7- Eligibility for graduation is formally verified in regulation to program and courses requirements .
- 8- Attendance requirements for students are made clear to student, monitored and enforced.
- 9- Student appeal and grievance procedures are specified in regulations, published, and made widely known within the institution. The regulations make clear the grounds on which academic appeals may be based, the criteria for decisions, and available remedies.

Areas requiring improvement :

- 1- More student advisors familiar with details of course requirements need to be available to provide assistance prior to and during the student registration process. Adhering to the student legislative list cleavers and careful implementation of list.
- 2- Deanship of students' academic record need to provide more computer authority on students data and reports including statistical data required for planning, reporting and quality assurance.
- 3- Additional provision should be provided for academic counseling, career planning and employment advice within the college, department.



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Priorities for action.

- 1- Establishing a central unit includes members from all sections of the college to provide direction and guidance to new applicants. One of this central committee first task is putting a future plan for the development of student management performance.
- 2- Developing a student survey for the beneficiaries of this administration to identify shortcomings in the previous period and what is proposed to achieve the best results. The surveys should reflect the different views to resolve the extent of satisfaction of the beneficiaries of the deanship of admission and registration.

Standard 6: Learning Resources Overall Rating *** Stars(3.28)

Learning resource materials and associated & services must be adequate for the requirements of the program and the courses offered within it and accessible when required for students in the program. Information about requirements must be made available by teaching staff in sufficient time for necessary provisions to be made for resources required, and staff and students must be involved in evaluations of what is provided Specific requirements for reference material and on-line data sources, and for computer terminals and assistance in using this equipment will vary according to the nature of the program and the approach to teaching.

Explanatory Report about this standard:

1. Learning resource materials and associated services in the department are adequate for the requirements of the program and the courses offered within it and accessible when required for students in the program.
2. Information about requirements are made available in sufficient time for necessary provisions to be made for resources required and students are involved in evaluations of what is provided.
3. Procedures are taken to ensure that resource materials and services needed to support student learning are adequate and appropriate for the program, regularly evaluated, and kept up to date as required. These procedures and measures include:
4. Student and teaching staff surveys about their satisfaction about adequacy of educational resources and services, extent of usage, consistency with



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5. requirements for teaching and learning.
6. Course & program reports that include evaluation of these resources and the suggested measures for their improving and development.
7. The curriculum development committee and its recommendations about saving and improving educational resources, learning materials, textbooks and references.
8. Adequate supports are provided to assist students and teaching staff to make effective use of library services and educational resources.

The evidence obtained for ensuring the quality of mission and objectives:

1. The results of user survey for student and teaching staff about adequacy of educational resources and services, extent of usage, consistency with requirements for teaching and learning.
2. Purchase requests for educational equipment, resources and services prepared by department teaching staff to the faculty administration.
3. Purchase orders for educational resources and services issued by faculty administration.
4. The availability of classrooms, staffing, seats, lighting, aeration and air conditioning & time table for their maintenance.
5. The availability of learning laboratories in the department which are well equipped with teaching & learning audio-visual aids.
6. The labs are also well equipped with assessment equipment in a sufficient numbers for student training.
7. The maintenance contracts for their safety and periodic follow up have been signed with a well-known companies in this field.
8. The availability of teaching & learning aids such as audio and/or visual equipment, models, educational media & CDs and simulation tools.

Performance indicators:

1. Number of specialized books in the library.
2. Rate of borrowing books by students.
3. Rates of frequent visiting of student to library.



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4. Average spending on purchase of textbooks and other educational materials.
5. Percentage of financial support allocated to spend on educational materials and equipment.

Summary of strengths:

1. Teaching resources are sufficient to large extent to support teaching and learning process and ensure achievement of the intended learning outcomes. This evidenced by:
2. The availability of classrooms, staffing, seats, lighting, aeration and air conditioning with time table for their maintenance.
3. The availability of learning laboratories in the department which are well equipped with teaching & learning audio-visual aids.
4. The labs are also well equipped with assessment equipment in a sufficient numbers for student training. The maintenance contracts for their safety and periodic follow up have been signed with a well-known companies in this field.
5. The availability of teaching & learning aids such as audio and /or visual equipment, models, educational media & CDs and simulation tools.
6. The subscription in many of well-known universal information bases and in many well reputed scientific sites and magazines in the field of specialization to provide an opportunity for students to see and use what 's new in the rehabilitation field in their learning activities
7. Ready access to on-line data-bases and research and journal.
8. King Abdallah library frequently organizes training courses and workshops for ail teaching staff and students ail over the university to kept them informed about library services, regulation of the library controlling the process of borrowing books, different database that university joint and how to access to them and any other changes in services.

Areas requiring improvement:



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1. Up to date computer equipment and software are needed on a sufficient scale to meet program requirements to support electronic access to resources and reference material.
2. Establishment of computer labs.

Priorities for action:

1. Assigning reading room in the department, for students, supplied with computers connected to the internet and the information databases in a way that allow them privacy.
2. Preparing a future plans for the purchase of educational books and other teaching aids as educational video, CDs, multimedia and models.
3. Expansion in conducting awareness and familiarity workshops to ail department members about the support services available in the faculty and university for students.
4. Preparing a future plan for purchasing, renewing and maintenance of the labs equipment's and signing maintenance contracts with a good reputation and high efficient companies.

7. Facilities and Equipment Overall Rating *Stars (3.04)**

Adequate facilities and equipment must be available for the teaching and learning requirements of the program. Use of facilities and equipment should be monitored and regular assessments of adequacy made through consultations with faculty, staff and students.

Introduction

Facilities at the College of Applied Science including Department of Physics include sufficient space and state of the technology which allow faculty to deliver effective and efficient learning-centred teaching through a variety of instructional methods and approaches in a conducive learning environment, while good use of these facilities and equipment enable students to take responsibility for their own learning. The use of these facilities and equipment



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are assessed regularly in terms of their suitability for all stakeholders, i.e. students, faculty and staff.

The use of facilities should be monitored and there should be processes to ensure that underutilized facilities are made available for alternative uses, subject to necessary arrangements for protection of expensive and easy to damage equipment.

In programs that require laboratory or other technical equipment including computing facilities, maintenance provisions should be effective and include routine maintenance schedules. Necessary technical support should be available and there should be an immediate response capacity in case of equipment breakdowns.

For all classrooms media needed for effective instruction should be provided with appropriate technical support available.

Umm Al-Qura University has attempted to introduce policies so that the planning, acquisition and maintenance of all its colleges' facilities and equipment are efficient and useful. Thus, clearly organised processes exist for the acquisition of facilities which includes tendering processes, procedures for procurement and invoicing systems to log and track inventories. There is also a documented system throughout the University for the maintenance and repair of facilities, as well as a well-defined system for planning and budgeting, involving certain academic and administrative units in Umm Al-Qura University.

Sub-Standards:

- Policy and Planning
- Quality of and Adequacy of Facilities
- Management and Administration
- Information Technology
- Student Residences

Evidence and Performance Indicators

Evidence about the quality of provision of facilities, equipment and software can be obtained from planning documents, user satisfaction surveys, comparisons of provision with comparable institutions offering similar programs and direct observations by independent evaluators.



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Condition assessments and maintenance schedules provide information about the quality and maintenance of facilities and major equipment. Regulations and codes of practice relating to the use of facilities and expensive equipment provide evidence of sound management practices and security arrangements. Performance indicators could include such things as ratings on surveys of user satisfaction, statistics on equipment breakdowns, comparisons of provision in relation to other institutions.

Describe the processes used to evaluate the quality of provision of facilities and equipment for the program:

The working group had:

- Reviewed facilities and equipment policy and planning at the Department of Physics, College of Applied Science, Umm Al-Qura University.
- Meet and interviewed the Deanships of E-transactions, E-learning, Distance Education, the Assistant of Vice Rector for Projects, general administrations for procurement, finance, strategic planning, maintenance, and university assets.
- Reading and analyzing reports and official documents pertaining to facilities and equipment.

Key Performance Indicators considered in this standard:

- Documentation of the planning process.
- The survey results of the user satisfaction.
- Assess the status of operation and equipment maintenance schedule information.
- No. of classrooms.
- No. of specific labs for student and their areas.
- No. of experiments in each lab.
- The rates of the use of space used in teaching.
- Students response on the statement "computer facilities and equipment for department of physics students sufficient for my needs".
- Number of Accessible Computer Terminal per students.
- Internet bandwidth per user.

7.1 Policy and Planning ***Stars (3)



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1. Careful and systematic planning to provide and maintain facilities and equipment is a part of the University's five-year plan which, once produced, is required to be monitored annually; this is, in turn, linked to the Kingdom's five-year development plan. KSU's five-year plan covers all the projects for facilities, equipment and services needed and every year the University must submit requests consistent with this plan for the annual budget, although unforeseen changes may be taken into consideration. If the proposed budget is accepted, KSU can implement its planned projects; if not, projects are shelved until the following year (which is noted in Objective 6 and its five initiatives in KSU's 2030 Strategic Plan).
2. Clear rules and regulations, as part of the government's procedures of procurement, control the acquisition of new equipment. However, for particularly urgent needs and perhaps for specific short-term projects, the standard may be altered with justification although, in practice, such occasions are rarities and are likely to occur less frequently in the future because of efforts of Umm Al-Qura University to plan effectively. Furthermore, Physics Department, in line with all departments in the College of Science, is required to submit an account of its needs in terms of facilities and equipment for the following academic year. This is reviewed, approved and then submitted to the University for final approval.
3. One of the main goals of the College of Science 2020 Strategic Plan is to keep abreast of technological developments as technology is vital in today's higher learning since it supports effective teaching. College of Science ensures that suitable technology is incorporated into many aspects of teaching for the majority of its faculty members and has made strenuous efforts to provide technology and support for its effective use. Physics acquire and run their own public-access computers; they are also required to keep an inventory of all equipment.
4. The College of Science has committed resources to instructional technology equipment and teaching tools in response to the information needs of its students and, as part of its mission, College of Science provides and supports technologies to offer the best learning environment through the provision of secure and reliable information and educational services.



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5. As a commitment to the utilisation of technology in teaching and learning, there is a plan to introduce Blackboard software to use as a Stimulated classroom; this will permit handouts and grades to be posted, will offer links to important websites, and will improve communication with students. A faculty coordinator, responsible for designing and scheduling training and for providing support for faculty in the online environment, has been appointed. In terms of registration, class size, evaluation, etc. the plan will follow guidelines established by the Deanship of faculty of science.
6. Survey results as shown in Figure S 7.1.1 that 75% of staff at physics department agreed and stated that Umm Al-Qura university has a long-term master plan approved by the governing body that provides for capital developments and maintenance of facilities

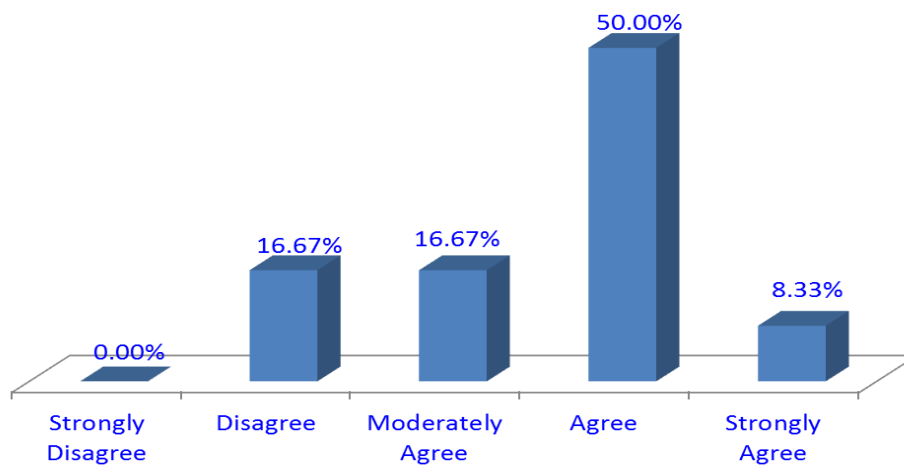


Figure S 7.1.1: The agreement of the long-term master plane (Staff opinion).

7.2 Quality and Adequacy of Facilities and Equipment ***Stars (3)

Several major improvements have been undertaken in terms of the quality and adequacy of the facilities and equipment in Physics Department, the College and the University as a whole. These enhancements include: the introduction of smart classrooms and the provision of new and upgraded computer laboratories; Internet bandwidth and wireless coverage have also been improved. Furthermore, fully equipped specific labs for each field of physics have been established in the College of Science.



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Quality evaluation processes in this area included obtaining feedback regarding the quality of the facilities and equipment from the main users; technician, and also via Deanship of faculty of science.

Survey results as shown in Figure S 7.2.1M that 58.83% of students at physics department (Aabdiya campus for male-student) stated that classroom including halls, laboratories are attractive and comfortable. In addition, 69.95% of students at physics department (Alzaher campus for female-student) stated that classroom including halls, laboratories are attractive and comfortable as described in Figure S 7.2.1F. This issue recognised and raised by the senior College and Department administration in a number of occasions at the Department, College and University levels. As a result, and more recently an ad hoc committee was established by the physics department to assess the current and future needs of its students, faculty members and staff.

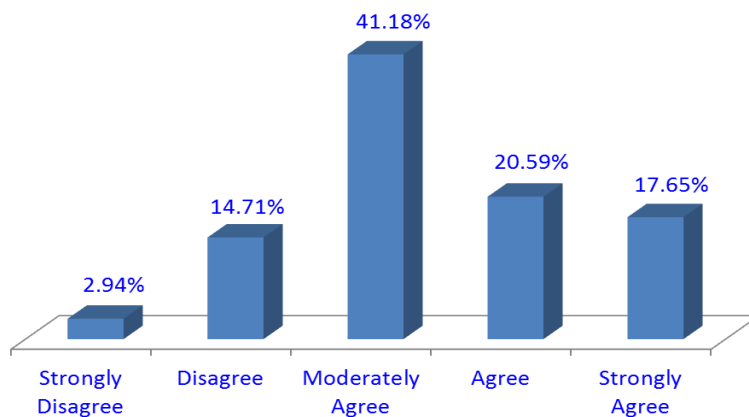


Figure S. 7.2.1M: Classroom (including lecture halls, laboratories) is attractive and comfortable (Male-Student opinion).



Physics Program

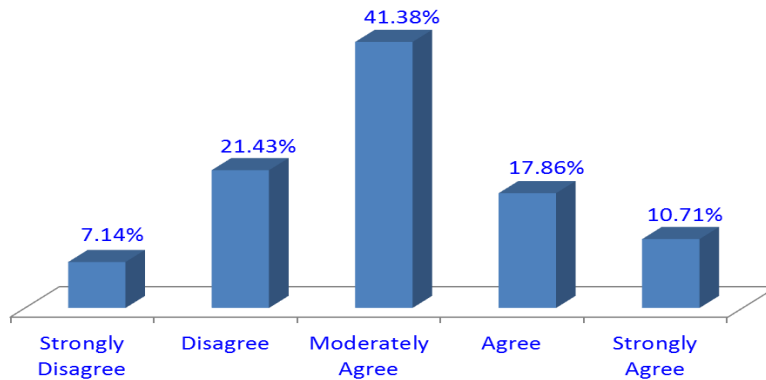


Figure S. 7.2.1F: Classroom (including lecture halls, laboratories) is attractive and comfortable (Female-Student opinion).

7.3 Management and Administration ***Stars (3)

All operations and maintenance of University projects, together with buildings and facilities, are the responsibility of the Vice Rectorate. However, the maintenance of computers and IT equipment is the responsibility of the Deanship of E-Transactions and Communications.

All office equipment is maintained centrally via a contract with the maintenance administration in the Vice Rectorate for Projects while maintenance for computers, software and IT equipment is the responsibility of the User Support Centre at the Deanship of E-Transactions and Communications. Smart room maintenance is carried out by the Deanship of E-Learning and Distance Education.

7.4 Information Technology ***Stars (3. 14)

The Department of Physics established its first stimulating and Learning Lab late in 2011, with the College of applied Science providing the technology and support for its effective use. This Centre has 29 PCs, which considered being insufficient to meets the physics department student's needs. However, the College of applied Science, on the other hand, has 12 computer labs are provided for its students. They are equipped with up-to-date technology and multiple software packages, both specialised and the more general and popular, for the use of both students and faculty.



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Table S.7.4.1: Number of Accessible Computer Terminal per students

Number of Students	Number of computers	Number of accessible computers per students
250 Male	29	0.12

All students are able to access PCs, Library and Information Resources, software applications, the Internet, on-line resources, e-mail, and printing resources. Staff offer open access to computer labs from at least 8:00 a.m. to 10:30 p.m on Sunday to Thursday, to help students log onto the student network; they also answer questions relating to use of the resources. Two general purpose teaching labs are shared while special purpose labs are designated to accommodate individual disciplines. The College has also smart classrooms which contain E-learning equipment such as a smart board, E-podium, projector, Internet connectivity, and full wireless network.

Survey results as shown in Figure S 7.4M reveals the opinion of male-students at physics department (Aabdiya campus for male student) while Figure S7.4F reveals the opinion of female-students at physics department (Alzaher campus for female student). More than half of the student satisfied the facilities of information technology at physics department.

Table S.7.4.2: Internet bandwidth per user

Total Internet bandwidth	Average Number of users	Internet bandwidth per user
2 Mo	50	40 Ko

Faculty members (i.e. all fulltime employees) in the Department have office computers running standard productivity software, such as Microsoft Office; they also provide e-mail,



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file and print facilities; virus protection and back-up support; and web services. A survey was carried out in order to measure faculty members satisfaction on the adequacy of equipment's and facilities.

More than half of the respondents as revealed in Figure S.7.4 (M for male- with mean 3.21 stated that they have adequate facilities in their offices.

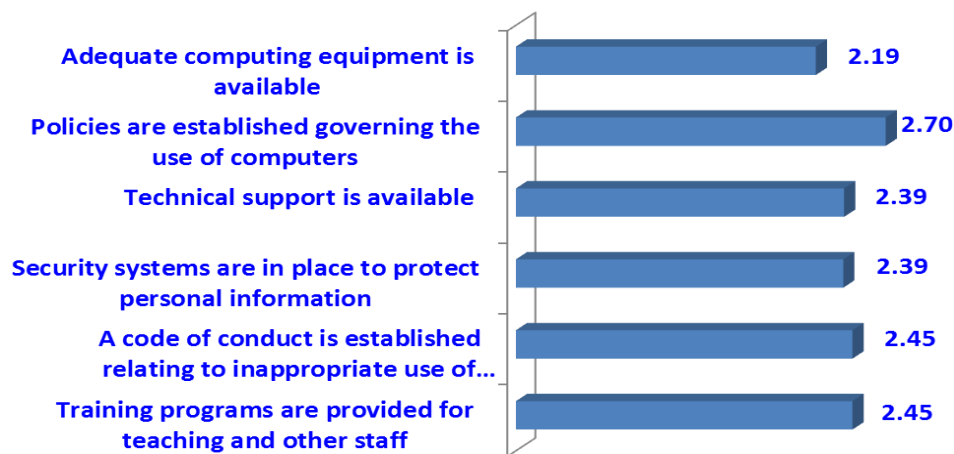


Figure S. 7.4 M: Information technology (including equipment, policies, technical support, Security and training) (Male-Student opinion).

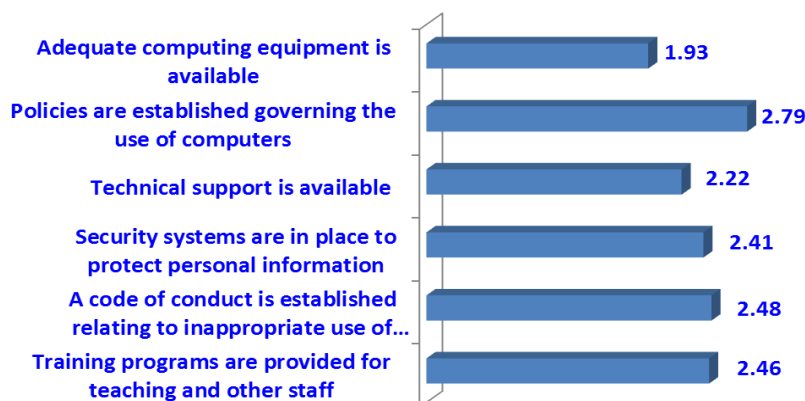


Figure S. 7.4 F: Information technology (including equipment, policies, technical support, Security and training) (Female-Student opinion).

7.5 Student Residences



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Some students state the status of student residences for male and female students. Residences are of appropriate standard, providing a healthy, safe and secure environment for students. Adequate facilities are available for privacy and individual study. The residences are effectively supervised by staff with the experience, expertise and authority to manage the facility as a secure and supportive learning environment. Adequate food, service, and medical facilities are available or readily accessible. Adequate and appropriate religious facilities are provided and maintained.

Summary of Strengths

- 1- Adequate facilities and equipment are available for the teaching and learning requirements of the program which are monitored and regular assessments are done of adequacy made through consultations with faculty staff and students.
- 2- Plans have been developed to balance the program requirements with institutional policies to ensure compatibility of systems and resources available.
- 3- The program's facilities and equipment are the most advanced and there is an effective strategy used to evaluate their adequacy for the program, their quality and the services associated with them.
- 4- There is an efficient management and administration of facilities, equipment and associated services that ensure maximum effective utilization of facilities provided.

Areas requiring improvement:

- 1- There is a defect in maintenance provisions as it does not include obligatory maintenance schedule.
- 2- There are some shortcomings in the sequence of the educational institution to use the facilities and the development of timetable for the process of equipment maintenance and follow-up status. Plans for improvement in quality are made but not yet implemented. Indicators of quality of performance are not established.
- 3- Still there is some room for improvement especially in the field of teaching facilities.
- 4- Satisfactory standards of performance are normally achieved although there is some room for improvement. There is defect in maintenance provisions as it does not include a routine maintenance schedules.



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- 5- There is a lack of mechanisms to assess the status of devices on a regular basis. The procedures exist for the organization of the shared use of underutilized facilities is less than satisfactory.
- 6- The practice is followed most of the time. Plans for improvement in quality are made and progress in implementation is monitored.
- 7- Teaching facilities are not adequate for the needs of the program.
- 8- Providing suitable student residence without outing during Hajj time.

Priorities for improvement

- 1- Setting conditions for companies providing scientific equipment need to conform to the schedule of periodic maintenance of devices.
- 2- Putting the evidence about the quality of provision of facilities, equipment and software.
- 3- Start in the implementation of plans for improvement in quality and the development of indicators to measure the quality of performance.
- 4- Establishment of a committee for tools and equipment for experimental physics.
- 5- Develop a plan for the devices condition assessments and maintenance schedules that provide information about the quality of these facilities.
- 6- Development of indicators to measure the quality of performance.
- 7- Provide more teaching facilities specially lecture room desktop and printing devices in addition to providing a means of communication allows confidential consultations between faculty and students.
- 8- Develop a plan for optimum utilization of underutilized equipment and facilities, taking into account the provision of adequate protection for these devices with the development of specific measures to assess the status of the equipment on a regular basis.
- 9- Starting in the implementation of plans for improvement in quality and the development of indicators to measure the quality of performance.

Standard 8 Financial Planning and Management Overall Rating * Stars (2.91)**



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Financial resources must be sufficient for the effective delivery of the program. Program requirements must be made known sufficiently far in advance to be considered in institutional budgeting. Budgetary processes should allow for long term planning over at least a three year period. Sufficient flexibility must be is provided for effective management and responses to unexpected events and this flexibility must be combined with appropriate accountability and reporting mechanisms.

Sub-Standards:

Financial Planning and Budgeting

Financial Management

Comment and General Description of Good Practice

Sufficient financial resources must be available to support the effective delivery of the program. This means both maintenance of routine and continuing activities and at least some provision for new initiatives do develop the program and improve its quality. Funds are not unlimited and resources must be effectively managed to avoid waste and adjust allocations when necessary from low priority to high priority items if required, or if possible to seek alternative supplementary funding opportunities... Some guide to adequacy can be obtained by considering funding levels for comparable programs in other similar institutions. However if this is done any such comparisons must take into account any variations in circumstances that may affect funding requirements. This standard relates not only to the adequacy of funding but also to the efficiency and flexibility of financial management by program managers. To provide for this flexibility and for appropriate accountability, delegations should provide for specified levels of expenditure to be authorized by the program manager subject to reporting and accountability requirements. Regular management reports should be provided to the program manager from the financial accounting system to permit monitoring of expenditure in relation to budget projections.

Evidence



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Evidence about the quality of financial planning and management can be obtained from budget statements and audit reports. Faculty surveys can provide information about whether resources considered by them to be necessary for the program are available. Comparisons of funding provisions with similar programs elsewhere can provide useful evidence of adequacy of provision provided care is taken to take account of any differences in the management of financial systems. Reports on risk assessment should be available together with strategies for risk minimization.

8.1 Financial Planning and Budgeting ***Stars (3)

- Funding must be adequate for program requirements and planning must involve full cost estimates and both short and medium term cost projections. Sufficient flexibility must be provided for effective management and responses to unexpected events and this flexibility must be combined with appropriate accountability and reporting mechanisms.
- The department does not plan an independent budget. All the financial issues are dealt with by other divisions of the university.

8.2 Financial Management ***Stars (2.83)

- Financial affairs must be effectively managed with a proper balance between flexibility for the cost center manager and institutional accountability and responsibility.
- The department does not have an independent budget. All the financial issues are dealt with by other divisions of the university

Standard 9 Employment Processes Overall Rating *** Stars (3.35)

Teaching and other staff must have the knowledge and experience needed for their particular teaching responsibilities and their qualifications and experience must be verified before appointment. New teaching staff must be thoroughly briefed about the program and their responsibilities before they begin. Performance of all faculty and staff must be periodically evaluated, with outstanding performance recognized and support provided for professional development and improvement in teaching skills. (Note: Teaching staff refers to all staff

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with responsibility for teaching classes including full and part time staff, faculty, lecturers, and teaching assistants)

Sub-Standards:

Recruitment

Personal and Career Development

Faculty must be appropriately qualified and must have the detailed knowledge and experience necessary for their particular teaching responsibilities. Relevant professional experience is particularly important in professional programs. Qualifications and experience must be verified before appointments are made. Faculty should be recruited for particular roles in the program and should be given detailed information about the program and their role as a member of a teaching team. This should also be done before appointment with further detailed orientation given by the program coordinator/manager before they begin their work. They should see themselves as members of a teaching team within a carefully planned and delivered comprehensive program, not just as instructors in a discrete subject specialty.

For all faculty and staff associated with the program feedback on performance should be provided in a constructive and supportive way and assistance given for improvements in both teaching skills and knowledge of their field.

Evidence and Performance Indicators

Evidence about quality of employment processes can be obtained from documents setting out employment and promotion processes and criteria, descriptions of orientation programs for new teaching and other staff, and procedures for performance evaluation and support for improvement. Records of assessments of quality of teaching, and teaching and other staff participation in professional development activities relevant to their employment can provide valuable evidence, particularly when they include ratios of participation and assessments of the value of those activities by the participants. Data on faculty turnover in parts of the institution can be used to indicate stability or instability in staffing. Regulations on dispute resolution combined with records of the incidence and outcomes of disputes can provide evidence about the effectiveness of those processes.



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Performance indicators almost always include student/teaching staff ratios and proportions of teaching staff with levels of qualifications. However a number of others that can also be readily quantified are important such as participation ratios in professional development and scholarly activities. Some others such as rates of turnover of teaching and other staff might be selected if there are problems in the institution that need to be monitored.

9.1 Recruitment ***Stars (3. 37)

Recruitment processes must be designed to ensure that capable and appropriately qualified teaching and other staff are available for all teaching and administrative functions, administered fairly, and that new staff are thoroughly prepared for their responsibilities. For Saudi candidates, the recruitment processes go through several steps that include exams, interviews and checking qualifications such as the educational degrees and publications. The candidates for recruitment must be nominated afterwards by the Department Council prior to pursuing the rest of the process:

- On the other hand, the process differs for non-Saudi candidates. The dean of the College interviews the candidates when he visits their countries for recruitment, and then recommends the qualified candidates to the department. The head of department approves the recommended candidates.
- Such descriptions are described in the Regulations, and can be collected from the Employees Affairs or from the website of the Ministry of Higher Education. The department does not provide this information independently.
- If the qualifications are obtained from abroad, the cultural attaché in the country of study checks them. However, if the qualifications are obtained from Saudi institutes then the UQU Employees Affairs checks them. The recruitment committee in case that the candidate works in other institute checks references.
- In case of Saudi candidates, the Ministry of Higher Education monitors the whole progress of education. This includes sponsoring staff members to peruse their degrees in highly reputed universities. For non-Saudi candidates, the Cultural Attaché in each country is responsible for this procedure.



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- In case of the Department of Physics, there are two sections, male and female. The male section has sufficient staff while the female section suffers from the lack of female staff. Although male staff members can teach female students by a means of CCTV, the department tries to minimize this way of teaching by appointing female staff members in every possible chance.
- In the case of technical assistance, the department suffers from the lack of enough technicians in both sections.
- The department does not offer any official orientation. However, the UQU does offer such programs occasionally.
- The staff/student ratio differs between male and female sections. Including all educational levels for staff members (i.e. BSc, MSc and PhD), there are 36 male members and 24 female ones. However, the number of male students is 235 while it is 928 for females. These data show the need of recruiting more female staff in the department. Moreover, the comparison with other universities is not possible due to the lack of the data in those universities.

Comment:

The qualifications and exams (where applicable) are saved for each employee in the department or the college. The policies upon which the recruitment procedure relies are announced clearly by the Ministry of Higher Education

Priorities for improvement:

- The recruitment for staff from outside the Kingdom takes place by the dean alone, which may not give the best outcome due to the dissimilarities between the dean's specialty and that for candidates. At least one member from the department should participate in this process.
- More technical staff is required.
- More female staff members are needed in the department.

9.2 Personal and Career Development ***Stars (3. 33)



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Processes for personal and professional development must be fair to all teaching and other staff, designed to encourage and support improvements in performance and recognize outstanding achievements.

1. For non-academic staff, there is an annual report that is performed by the head of department. This report is written and kept in the Employees Affairs of the UQU. For teaching staff there are two categories. First is the non-Saudi members for which a committee formed by the dean of college evaluates their performance annually. Such evaluation is the base on which the annual raise of the salary is decided. The second category is the Saudi members, who do not have evaluation except in the case of requesting a promotion or the case if they request to work in the department of retirement.
2. All evaluation processes are totally confidential, and only authorized employees are allowed to read the reports of evaluation.
3. The head of department informs the member who has unsatisfactory performance with the requirements of improvement. Such information may be provided either verbally or as a written letter.
4. All assessment reports are kept confidentially at either the Department or the College.
5. In case of achieving an outstanding performance, the Department Council recommends the rewards specified in the regulations of the Ministry of Higher Education for such cases. For the non-Saudi members, the outstanding performance is a key factor in the annual raise of the salary
6. The UQU offers a variety of courses for the staff members. Moreover, academic staff members can attend courses and conferences totally paid by the UQU (for Saudi members only). The non-Saudi members may be permitted to attend conferences but without any financial support by the UQU. Administrative members can also attend courses after the approval of the head of department.
7. This is related to the deanship of the college rather than the department of physics.
8. Besides the activities mentioned in Section 9.2.6, the Department may arrange scientific seminars and also may invite speakers from other universities for such activities.
9. The Department does not offer such activities.



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10. Teaching staff are expected to participate in activities that ensure they keep up to date with developments in their field and the extent to which they do so is monitored.

Comment

- The Policies and Regulations for the issues mentioned in this Standard are announced by the Ministry of Higher Education. The recruitment for staff from outside the Kingdom takes place by the dean alone, which may not give the best outcome if no member from the department participates in this process.
- The staff/student ratio varies between Boys section and Girls section.

Priorities for improvement

- More explanation is needed for announced policies.
- The department should be more involved in recruitment staff members from outside the Kingdom.
- The ration of student/staff member should be tuned between boys and girls sections.
- More technical staff is required.
- The changes and updates that take place in the Regulations are not announced periodically.

Standard 10 Research Overall Rating *** Stars (2.88)

Teaching Staff and Student Involvement in Research ***Stars (3)

Expectations for teaching staff involvement in research and scholarly activities must be made clear and provide for widespread participation. Encouragement and support must be provided to encourage research activity by junior teaching staff and postgraduate students.

10-1-1 Expectations for teaching staff involvement in research and scholarly activities are clearly specified and considered in performance evaluation and promotion criteria. (For universities criteria require at least some research and/or appropriate scholarly activity of all full time teaching staff).

10-1-2 Clear policies are established in the institution for defining what is recognized as research, consistent with international standards and established norms in the field of study of the program. (This normally includes both self-generated and commissioned activity but requires creative original work, independently validated by peers, and published in media recognized internationally in the field of study).

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10-1-3 Support is provided for junior staff in the development of their research programs through mechanisms such as mentoring by senior colleagues, inclusion in project teams, assistance in developing research proposals, and seed funding.

10-1-4 Postgraduate research students are given opportunities for participation in joint research projects.

10-1-5 When research students are involved in joint research projects their contributions are appropriately acknowledged. When a significant contribution has been made reports and publications carry joint authorship.

10-1-6 Assistance is available for teaching staff to develop collaborative research arrangements with colleagues in other institutions and in the international community.

10-1-7 Research and scholarly activities of teaching staff that are relevant to courses they teach are reflected in their teaching together with other significant research developments in the field.

10-1-8 Strategies are developed for identifying and capitalizing on the expertise of faculty and postgraduate students in providing research and development services to the community and generating financial returns to the institution.

10-2 Research Facilities and Equipment *Stars (2.88)**

Adequate facilities and equipment appropriate for research in the program field of study must be available for use by teaching staff and postgraduate students. Clear policies must be established for ownership and care for specialized facilities and equipment obtained through research grants or cooperation with industry.

10-2-1 Adequate laboratory space and equipment, library and information systems resources are available to support the research activities of faculty and students in the field in which the program is offered.

10-2-2 Security systems are established that ensure safety for researchers and their activities, the institutional community and the surrounding region.

10-2-3 Policies are established to make clear the ownership and responsibility for maintenance of equipment obtained through faculty research grants, commissioned research or other external sources.

10-2-4 Adequate budget and facilities are provided for the conduct of research at a level consistent with institutional, program and departmental.

Performance indicators

- 1) The number of teaching staff that are involved in different research projects (see Fig.(10.1)).



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- 2) The number of publications and citations over the last 6 years (see Fig.(10.2)).
- 3) The number of postgraduate students who are given the opportunity for participation in M.Sc programs (see Fig.(10.3)).
- 4) The amount of funding awarded for research projects (see Fig.(10.4)).
- 5) The research labs available for the research purposes in the physics department. These include Nano-technology, Optics, Thin films and Material Science laboratories.



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Fig.10.1.a List of the research groups of physics department.



Physics Program



Fig.10.1.b List of the research groups of physics department.

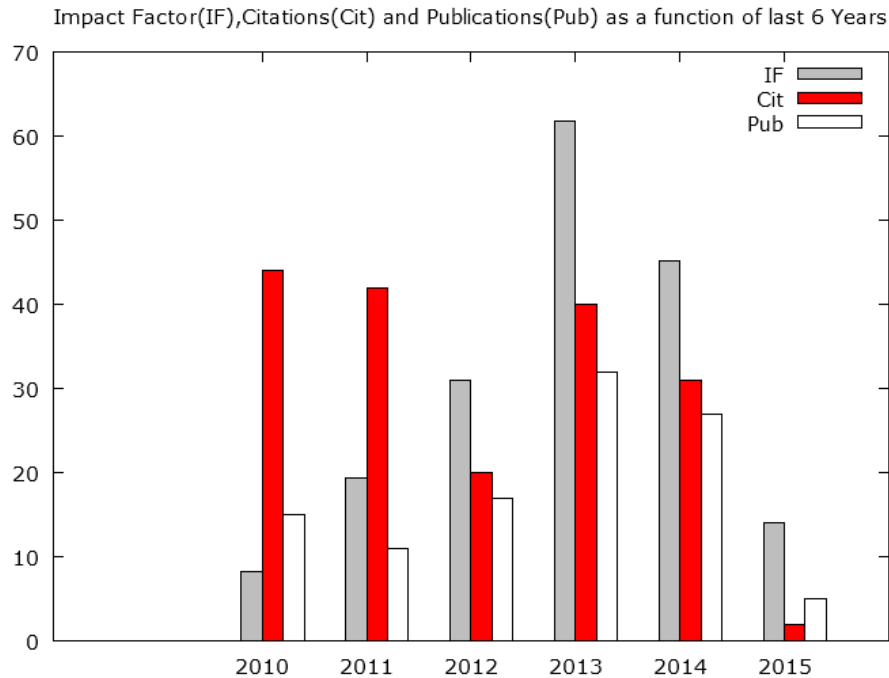


Figure 10.2 The progress of peer reviewed publications of the physics department over the last 6 years (Last updated 5th of April 2015).



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Figure 10.3 The number of M.Sc students that enrolled in the physics department
(Last updated 5th of April 2015).

Figure 10.4 A schematic diagram representing the amount of funding over the last 6
years (Last updated 5th of April 2015).

Summary of strengths

- 1- The presence of many scientific, research institutes. The university encourage scientific research and provide the required financial support for the distinct research projects. These sectors are working under the umbrella of the vice president of UQU for scientific researches.



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2- These units include:

- ✓ Institute of scientific research and revival of Islamic heritage.
- ✓ A unit that is related to the King Abdul-Aziz city for science and technology.
- ✓ The custodian of the two holy mosques.

- 3- All teaching staff in the programs is involved in scholarly activities that ensure they remain up to date with developments in their field.
- 4- The postgraduate students are conducting scientific dissertation and contribute to the research projects.
- 5- There is significant activity of the faculty members through participation in research projects, supervising dissertation, publications and patents.
- 6- Support is provided for junior staff in the development of their research programs through mechanisms such as mentoring by senior colleagues, inclusion in project teams, and assistance in developing research proposals.
- 7- Most of teaching staff are working full time.
- 8- Most of department staff members participate in research activities in the fields of study they teach and involve their students in the activities.
- 9- Increase the amount of funds allocated for research projects and the names of appropriate funders and donors.
- 10- The research labs are equipped with research devices.

Areas required improvements

- The relatively old M.Sc program (which start in 2000) should be replaced with a modern one to attract more post-graduate students.
 - The scientific instruments should be maintained regularly by technicians.
- 1- Purchase modern instruments to conduct high quality research with postgraduate students.
 - 2- Increase the cooperation with other international institutes for scientific research.
 - 3- Reduce hours of teaching faculty members to conduct scientific research.
 - 4- Prepare available large area library including internet service.
 - 5- The devolvement of the scientific laboratory in female section should be taken in consideration.



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11. Relationships with the Community Overall Rating *** Stars (2.71)

Substandard

Significant and appropriate contributions must be made to the community in which the institution is established drawing on the knowledge and experience of staff and the needs of the community for that expertise. Community contributions should include both activities initiated and carried out by individuals and more formal programs of assistance arranged by the institution or by program administrators. Activities should be documented and made known in the institution and the community and staff contributions appropriately recognized within the institution.

11.1 Policies on Community Relationships ***Stars (3)

11.1.1 The service commitment of the program should be defined in a way that reflects the community or communities, within which the institution operates, and the skills and abilities of staff teaching in the program.

11.1.2 The contributions to the community made by staff teaching in the program are recorded and reported upon on an annual basis.

11.1.3 Promotion criteria and faculty assessments include contributions made to the community.

11.1.4 Departmental or program initiatives in working with the community are coordinated with responsible units in the institution to avoid duplication and possible confusion.

11.2 Interactions with the Community **Stars (2.42)

11.2.1 Staff are encouraged to participate in forums in which significant community issues are discussed.

11.2.2 In a professional program, relationships are established with local industries and employers to participate on advisory committees and assist program delivery. (These may include, for example, placement of students for work-study programs, part time employment opportunities, and identification of issues for analysis in student project activities.)

11.2.3 Local employers and members of professions are invited to join appropriate advisory committees.

11.2.4 Contacts are established with schools in the region offering assistance and support in areas of specialization, providing information about the program and subsequent career



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opportunities for graduates, and arranging enrichment activities for students at the schools. (If a section within the institution has responsibility for coordinating these relationships, contacts are arranged in consultation with that section.)

11.2.5 Regular contact is maintained with alumni, keeping them informed about institutional developments, inviting their participation in activities, and encouraging their financial and other support for new initiatives.

11.2.6 Opportunities are taken in cooperation with institutional administrators to seek funding support from individuals and organizations in the community for research and other developments associated with the program.

11.2.7 Records are maintained of community services undertaken by individuals and centers or other organizations within the department and provided regularly for recording in a central data base within the institution.

Explanatory Report about this standard

- The missions of UQU, Faculty of Applied Sciences program make clear the nature of its contribution to the communities.
- The physics program introduce significant and appropriate contributions to the surrounding community drawing on the knowledge and experience of staff and the needs of the community for that expertise.
- Community contributions include both activities initiated and carried out by individuals and more formal programs arranged by the faculty, university or by program administrators. Activities are documented and made known in the institution and the community, and staff contributions appropriately recognized within the university.

Evaluation of Quality of Relationships with the Community

The evidence obtained for ensuring the quality of Relationships with the Community:

1. Support from individuals and organizations in the community for research and other developments associated with the program.
2. List of staff participation and attendance in different forums, meetings and events aiming for discussing of significant community issues
3. Establishment of a consultation and advisory committee in the department whose members include academic personnel (from the department) and professionals experts



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as well as international experts from similar regional and international universities and programs for annually reviewing program specifications, courses specifications, the learning outcomes of the program .

4. Participation of the department staff members in arrangement of enrichment program for students at the school level. Such as participation of the department in the activities of summer program for giftedness enrichment designed for caring of gifted student at the level of prep or intermediate school
5. The percentage of department staff members participating in community services events.
6. Performance indicators
 - ✓ The percentage of department staff members participating in community services events.
 - ✓ The numbers of annual contributions to the community made by teaching staff in the program.
 - ✓ The numbers of community organizations, companies, schools and others that have benefited from the provision of community services introduced by the department.
 - ✓ Services provided by the program compared to the needs of the community.

Summary of strengths

The service commitment of the program is defined in a way that reflects the community or communities, within which the institution operates, and the skills and abilities of staff teaching in the program.

1. Departmental initiatives in working with the community are coordinated with responsible units in the institution to avoid duplication and possible confusion.
2. Staffs are encouraged to participate in forums in which significant community issues are discussed.
3. Local employers and members of professions are invited to join appropriate advisory committees.

Areas requiring improvement:



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The importance of establishing contacts with schools in the region and offering assistance and support in areas of specialization, providing information about the program and subsequent career opportunities for graduates, and arranging enrichment activities for students at the schools. (If a section within the institution has responsibility for coordinating these relationships these contacts are arranged in consultation with that section.) Regular contact is maintained with alumni, keeping them informed about institutional developments, inviting their participation in activities, and encouraging their financial and other support for new initiatives.

Priorities for action.

- 1- Relationships should to be established with local industries and employers to participate on advisory committees and assist in delivery of professional program. (These may include, for example, placement of students for work-study programs, part time employment opportunities, and identification of issues for analysis in student project activities.)
- 2- Developing data base about the relationship and Interactions of the program with the Community for Recording different community services and events undertaken by individuals and centres or other organizations within the department.

List of community service events that physics department share in the academic year 2012-2013:

	Event	Avenue
1	Program auspices of talented to primary schools	Mena primary school - Makkah
2	Training courses for workers	Department of Medical Physics at King Faisal Specialist Hospital



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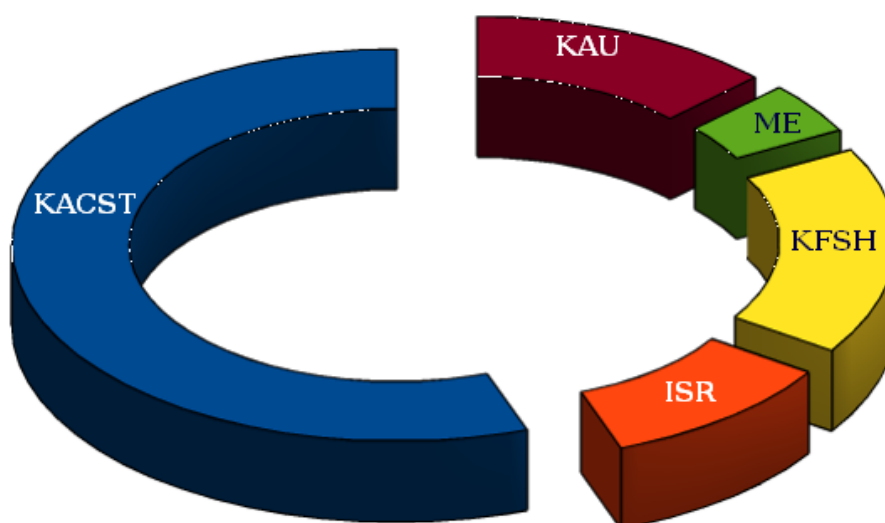


Fig.11.1 Participation of faculty members in different domestic research organizations. KACST, KAU, ME, KFSH and ISR denote King Abdul-Aziz City for science and technology, King Abdulaziz University, Ministry of Education, King Faisal Specialist Hospital and Institute of Scientific Research, respectively.

H Review of Courses

1. Describe processes followed in reviewing courses. (Eg. Surveys of graduates, faculty, or members of the profession, analysis of student course evaluations, review of course and program reports, interviews with faculty, comparison with similar programs elsewhere, consultancy advice, etc.)

- The process used to obtain independent comment on the self-study include a review of documentation by experienced and independent persons familiar with similar program and who could comment on relative standards, consultancy advice or a report by a review panel, or even the results of an accreditation review by an independent agency. An independent evaluation may be conducted in relation to the total self-study, or involve a number of separate comments by different people on different issues.

1. Internal evaluation for the program is mostly done every year.
2. Program evaluations are described by some axis such as:
 - a) Graduate Students questioner
 - b) Department compare with peer programs
3. Through this evaluation a comparison with other well-known international



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universities and institutions are discussed departmentally.

4. The following table present the comparison were the intended learning outcome appears.
5. Consistency of the expected learning outcomes of the program with the National Qualifications Framework and Benchmarking

Comparison Items	Knowledge ; Facts ; Concepts ; Theories ;Actions
National Qualifications for High Education	<ol style="list-style-type: none"> 1. Knowledge of certain facts 2. Knowledge of the concepts and principles and specific theories. 3. Knowledge of certain procedures
University of California Santa Barbra	<ol style="list-style-type: none"> 1. Apply the basic laws of physics in the areas of classical mechanics, Newtonian gravitation, special relativity, electromagnetism, geometrical and physical optics, quantum mechanics, thermodynamics and statistical mechanics. 2. Recognize how observation, experiment and theory work together to continue to expand the frontiers of knowledge of the physical universe. 3. Apply basic mathematical tools commonly used in physics, including elementary probability theory, differential and integral calculus, vector calculus, ordinary differential equations, partial differential equations, and linear algebra.
British Quality Assurance Agency (QAA)	<ol style="list-style-type: none"> 1. Recognize general and fundamental topics of physics, provide a selection of more advanced topics, and develop investigative, experimental, mathematical, computational, modelling and other generic skills. 2. Apply basic courses, include classical mechanics, statistical physics and thermodynamics, wave phenomena electromagnetism, quantum and the properties of matter.



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	<p>3. Apply the fundamental principles to particular areas include (but need not be limited to) atomic physics, nuclear and particle physics, condensed matter physics, materials, optics, plasmas, and fluids.</p>
Physics Program in UQU	<p>1. The student understand more advanced topics the properties of matter</p> <p>2. The fundamentals, which all students need to cover, including electromagnetism, quantum and classical mechanics, relativity, statistical physics and thermodynamics, wave phenomena and the properties of matter, solid state physics and nuclear physics .</p> <p>3. The application of the fundamental principles to particular areas. These include nuclear and particle physics, condensed matter physics and atomic structure.</p> <p>4. Know the more general and fundamental concepts in physics and related fields.</p> <p>5. Define and formulate fundamental laws in physics.</p>
Result	Consistency
Comparison Items	Cognitive skills
National Qualifications for High Education	<p>1) The application of the conceptual perception of the concepts, and principles, and theories.</p> <p>2) The application of the methods included in the critical thinking and creative solution to the problems, whether it's at the request of others, or when faced with new situations and unexpected.</p> <p>3) The study of topics and problems in the field of study using a range of diverse sources and draw valid conclusions.</p>
University of California Santa Barbra	a) Use basic laboratory data analysis techniques, including distinguishing statistical and systematic errors, propagating



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	<p>errors, and representing data graphically.</p> <p>b) Convert a physical situation articulated in English to a mathematical formulation, and then analyze it quantitatively.</p> <p>c) Exercise the use of physical intuition, including the ability to guess an approximate or conceptual answer to a physics problem and recognize whether or not the result of a calculation makes physical sense.</p> <p>d) Apply more advanced mathematical tools, including Fourier series and transforms, abstract linear algebra, and functions of a complex variable.</p> <p>e) Use classic experimental techniques and modern measurement technology, including analog electronics, computer data acquisition, laboratory test equipment, optics, lasers, and detectors.</p>
<p>British Quality Assurance Agency (QAA)</p>	<p>a) Students learn that physics is a quantitative subject and appreciate the use and power of mathematics for modelling the physical world and solving problems.</p> <p>b) Students experience of the practical nature of physics and they provide with the skills necessary to plan investigations and collect and analyze data, including estimation of inherent uncertainties.</p> <p>c) All graduates in physics have some appreciation of natural phenomena in an experimental context.</p> <p>d) Students are proficient in presenting experimental results or theoretical conclusions and in the writing of reports.</p>
<p>Physics Program in UQU</p>	<p>1. The student learn an advanced mathematics and its application in physics, ability to apply knowledge and skill in practical work environment and knowledge of basic sciences, mathematics, computational methods and Physics principles.</p> <p>2. Ability to perform analysis, design and evaluation of a</p>



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	<p>physics problem,</p> <ol style="list-style-type: none"> 3. Solve the problems and explain a physical formula, collect and analyze data 4. A few subjects study in greater depth and appreciate current developments at the frontiers of the subject. 5. Perception and understanding of the concepts the student different physical and the ability to distinguish between them and criticize them and resolve issues related to the applications of these principles. 6. Ability to use various references to different conclusions and the search for appropriate solutions to the problems of relatively complex.
Result	Consistency

Comparison Items	Relationship and Responsibility
National Qualifications for High Education	<ol style="list-style-type: none"> 1) Take responsibility for their own learning and self-continuing personal and professional development. 2) Work effectively in a group and exercise leadership when needed. 3) Act responsibly in personal and professional relationships. 4) Behave ethically and commitment to ethical values high on the scale of personal and social
University of California Barbra	Access information on a topic from a variety of sources, and be able to learn new things on one's own.
British Quality Assurance Agency (QAA)	<ol style="list-style-type: none"> a) Physics degree programs involve students in solving problems with well-defined solutions and also gain experience in tackling open-ended problems. b) Students develop their ability to formulate problems in precise terms and to identify key issues. c) They should develop the confidence to try different



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	<p>approaches in order to make progress on challenging problems.</p> <p>d) Students have opportunities to develop their skills of independent investigation.</p> <p>e) Students generally have experience of using textbooks, and other available literature, of searching databases and the internet, and of interacting with colleagues to derive important information.</p> <p>f) Students should appreciate that to fabricate, falsify or misrepresent data or to commit plagiarism constitutes unethical scientific behavior. They should be objective, unbiased and truthful in all aspects of their work and recognize the limits of their knowledge.</p>
Physics Program in UQU	<ol style="list-style-type: none"> 1. The students have the ability to work in a group, complete all assignments in due time, participate in class discussion and think critically 2. Students can act responsibly and ethically in carrying out individual as well as group projects. 3. Students have the necessary skills to evaluate peers' answers and solutions, point and correct their mistakes 4. Students responsible for their own learning that requires using means to find new information data, or techniques of analysis. 5. The students be aware of ethical and professional issues involving values and moral judgments in ways that are sensitive to others and consisting with underlying values and relevant to professional codes of practice.
Result	Consistency



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Comparison Items	Communication skills
National Qualifications for High Education	<ol style="list-style-type: none"> 1) Oral and written communication effectively. 2) The use of telecommunications and information technology. 3) The use of computational methods and basic statistical
University of California Santa Barbra	<ol style="list-style-type: none"> 1. Communicate verbally, graphically, and/or in writing the results of theoretical calculations and laboratory experiments in a clear and concise manner that incorporates the stylistic conventions used by physicists worldwide. 2. Access information on a topic from a variety of sources, and be able to learn new things on one's own.
British Quality Assurance Agency (QAA)	<ol style="list-style-type: none"> 1. Physics and the mathematics used in physics deal with surprising ideas and difficult concepts; good communication is essential. A physics degree should develop a student's ability to listen carefully, to read demanding texts, and to present complex information in a clear and concise manner. 2. physics helps students learn the need to pay attention to detail and to develop their ability to manipulate precise and intricate ideas, to construct logical arguments and to use technical language correctly. 3. Students will develop their computing and skills in a variety of ways, including their ability to use appropriate software such as programming languages and packages. 4. Students develop their ability to work independently, to use their initiative and to organize themselves to meet deadlines. Gain experience of group work and be able to interact constructively.
Physics Program in UQU	<ol style="list-style-type: none"> 1. Student be able to develop simple programs to solve some numerical problems and have a sufficient background in statistical or mathematical techniques that will enable them to apply in interpreting and proposing solutions 2. Introduce courses in English which will require reading,



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	<p>writing, and oral presentation.</p> <ol style="list-style-type: none">3. Introduce two courses in computer application and programming which will prepare students to use available software and develop simple programs.4. Students' numerical skills will be tested in the courses in math, probability and statistics, analysis and in experimental work.
Result	Consistency

2. Summary of matters raised by independent evaluator(s)

- 1- An assessment require inspection of laboratories, equipment, class rooms and interviews with faculty ,staff and students for a comprehensive evaluation of the program, facilities and the learning environment.
- 2- Evaluation of the extent and quality of community activities associated with the program and of staff teaching in it.
- 3- Every two-year interval a comprehensive survey of the employers and alumni carried out to collect data and information on the attainment of the program's educational objectives and outcomes.
- 4- Additionally, face-to-face exit interviews conducted with the graduating students to receive feedback on the program, delivery , learning experience and outcomes

2. Course Evaluations

- 1- Arranging meeting to discuss the best course content to the program, syllabii of the courses are reviewed by the Undergraduate Committee of the department to ensure compliance to the department's needs.
- 2- Self-evaluation carried out using faculty input, course files, and students' evaluation of courses to objectively determine the course coverage, students' learning and satisfaction.
- 3- Grades in a course distributed on the basis of grade distribution among the testing tools which include major midterm exams, final exam, quizzes, homework, lab work,



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- project work, and term papers.
- 4- The weight on final exam not less than 35% and the aggregate weight on all other major exams less than 30%.
 - 5- The entry-level students administered a locally developed skill-testing test to measure the level of skill and knowledge.
 - 6- The graduates will be tested through a locally developed exit exam to measure of the level of attainment of the learning outcomes.
 - 7- During the course, students provide feedback to the lecturer via course questionnaires. Questionnaire summaries are discussed each term at the staff student consultative committee providing additional student feedback. At the end of each physics course the lecturer completes a pro-forma report, including a summary of student questionnaire responses.
 - 8- All courses have course specification formulated in NCAAA template. Course specification document includes: general information about the course, the course content, general and specific objectives, methods of teaching and assessment, learning resources, facilities requires and finally evaluation and improvement processes. These documents are written by the course coordinator after consultation of all faculties sharing in the course.
 - 9- At the end of the course student surveys (overall course satisfaction and specific faculty evaluations) are carried out by the students. Policies and procedures for students' evaluation for the courses and staff members were developed. The response is voluntary. All results are analyzed by the Department (Assessment and Accreditation Committee).

I Independent Evaluations

Describe the process used to obtain independent comment on the quality of the program and the reliability and validity of analyses carried out in the report. Processes may include a review of documentation by an experienced and independent person familiar with similar programs at other institutions and who could comment on relative standards, consultancy advice or a report by a review panel, or even the results of an accreditation review by an



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independent agency. An independent evaluation may be conducted in relation to the total self-study, or involve a number of separate comments by different people on different issues.

1. In each course a 10% sample of tests and assignments are check marked by another member of faculty each semester to confirm the standards of assessment. If significant differences are found courses are second marked and differences resolved by the department chair.
2. Every third year an international visiting team visits the faculty and as part of its evaluation the standards of students work and grades allocated are checked against international standards peer review, appraising progress and identifying changes that need to be made. The reports are discussed at theme group meetings who monitor the quality of module delivery and syllabus related issues across groups of related modules forming subject themes
3. Every three- year, a team of independent evaluators invited to evaluate the program on the basis of an on-site visit for which the course files of all courses that will also contain the samples of best and worst student work will be made available. Such an assessment may require inspection of laboratories, equipment, class rooms and interviews with faculty ,staff and students for a comprehensive evaluation of the program, facilities and the learning environment. The findings and recommendations of the evaluating team will be used for the improvement of the program.

4. Summary of matters raised by independent evaluator(s)

5. Comment on matters raised by independent evaluator(s) (Agree, disagree, further



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consideration required, action proposed, etc.)

J Conclusions

1. **List and briefly describe** aspects of the program that are particularly successful or that demonstrate high quality.

To follow a wide variety of careers, these careers include scientific research; Physics-related careers in industry, public service or the media; and other employment which values the analytical, mathematical and computational skills of a well-trained Physics graduate

2. **List and briefly describe** aspects of the program that are less than satisfactory and that need to be improved.

1. The knowledge or skill the program is intended to develop and the level of that knowledge and skill. (as a guide see general descriptions of knowledge and skills in the National Qualifications Framework for the qualification level of this program;
2. The teaching strategies to be used in courses in the program to develop that knowledge and those skills. (This should be a general description of the approaches taken throughout the program but if particular responsibility is to be assigned to certain courses this should be indicated.);
3. The methods of student assessment to be used in courses the program to evaluate learning outcomes in the domain concerned.



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K. Action Proposals

These should be based on the matters identified in sections F, G, H, and I above and indicate specific actions proposed to deal with the most important priorities for action identified in those sections.

1. Changes in Course Requirements (if any)

List and briefly state reasons for any changes recommended in course requirements, e.g.

- Courses no longer needed;
- New courses required;
- Courses merged together or subdivided;
- Required courses made optional or elective courses made compulsory;
- Changes in pre-requisites or co-requisites
- Changes in the allocation of responsibility for learning outcomes as shown in the course planning matrix.

2. Action Recommendations.

Recommendations should be made for action to be taken for further improvements or to overcome problems or weaknesses identified. The actions recommended should be expressed in specific terms rather than as general statements. Each action recommendations should indicate who should be responsible for the action, timelines, and any necessary resources.



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Action Recommendation 1
Person (s) responsible
Timelines (For total initiative and for major stages of development)
Resources Required
Action Recommendation 2.
Person(s) responsible
Timelines



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Resources Required
Continue for further action recommendations.

List of community service events that physics department share in the academic year 1433-1434:

	Date	Event	Avenue
1	15/8/1434	Program auspices of talented to primary schools	Mena primary school - Makkah
2		Training courses for workers	Department of Medical Physics at King Faisal Specialist Hospital