ASIIN

Umm Al-Qura University

ANNUAL PHYSICS PROGRAM REPORT

Physics Department

Faculty of Applied Science

Umm Al-Qura University, Makkah, Saudi Arabia

March, 2017

Program Eligibility: The program is to submit the two most recent APRs as part of the requirements for program eligibility using the NCAAA Template.

Post Accreditation: The program is required to annually complete an APR. The APR is to document a complete academic year.

APR's are prepared by the program coordinator in consultation with faculty teaching in the program. The reports are submitted to the head of department or college, and used as the basis for any modifications or changes in the program. The APR information is used to provide a record of improvements in the program and is used in the Self Study Report for Programs (SSRP) and by external reviews for accreditation.

Annual Program Report

1. Institution: Umm Al-Qura University Date of Report: 26/3/2017
2. College/ Department: Faculty of Applied Science, Physics Department
3. Dean: Waleed J. Altaf
4. List all branches/locations offering this program 1. Main Campus (Abdia)_for males

A. Program Identification and General Information

Program title and code: **B. Sc. Physics**
Name and position of person completing the APR: Dr. Abdelrahman Lashin, Dr. Ramadan Ali Hassan Dr. Mohamed Sabry Dr. Walid Belhaj Dr. Atif Ismail
Academic year to which this report applies. 1436-1437H : 2015-2016M

B- Statistical Information

1. Number of students who started the program in the year concerned: 43
2. (a) Number of students who completed the program in the year concerned: 38 Completed the final year of the program: 38 Completed major tracks within the program (if applicable): Title……No Title……No Title……No Title…… .No

2. (b) Completed an intermediate award specified as an early exit point (if any)

Not Applicable

3. Apparent completion rate.

(a) Percentage of students who completed the program, 88%

(Number shown in 2 (a) as a percentage of the number that started the program in that student intake.)

(b) Percentage of students who completed an intermediate award (if any) N/A

(e.g. Associate degree within a bachelor degree program)

(Number shown in 2 (b) as a percentage of the number that started the program leading to that award in that student intake).

Not Applicable

Comment on any special or unusual factors that might have affected the apparent completion rates (e.g. Transfers between intermediate and full program, transfers to or from other programs).

4. Enrollment Management and Cohort Analysis (Table 1)

Student Category	2012-2013	2013-2014	2014-2015	2015-2016
Graduated successfully	60	79	81	38

C. Program Context

1.Significant changes within the institution affecting the program (if any) during the past year.

No significant changes

Implications for the program

2. Significant changes external to the institution affecting the program (if any) during the past year.

No significant changes

Implications for the program

D. Course Information Summary:

1. Course Results. Describe and analyze how the individual NCAAA "Course Reports" are utilized to assess the program and to ensure ongoing quality assurance (eg. Analysis of course completion rates, grade distributions, and trend studies.)

(a.) Describe how the individual course reports are used to evaluate the program.

Course reports contain summaries of objectives of such course, covered items, non-covered items, completion and success percentages and learning outcomes. It also contains the used methods of teaching, recommendations of the professor.

The departmental committee reviews course reports periodically and summarizes the feedback items for each course. The collected feedback points (recommendations and strengths) of course reports are taken into considerations in the preparation of the program report

(b.) Analyze the completion rates, grade distributions, and trends to determine strengths and recommendations for improvement.

(1.) Completion rate analysis:

	First term	Second term
Completion rate	76.8%	83.6%

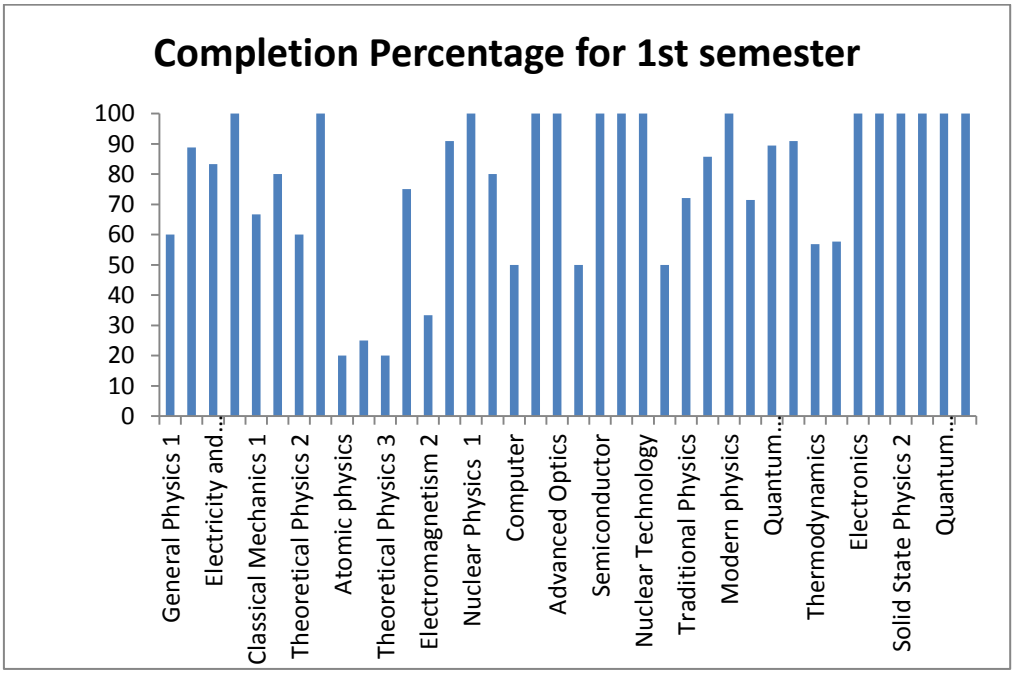
2.) Grade distribution analysis:

(3.) Trend analysis (a study of the differences, changes, or developments over time; normally several semesters or years):

Analysis for the 1st Semester 2015-2016

Code	Course Title	A	A+	B	B+	C	C+	D	D+	Not complete	Complete	Sum	Comp. %
403101	General Physics 1	1	1	2	4	2	3	5	0	12	18	30	60
403102	General Physics 2	24	17	42	26	36	34	41	25	31	245	276	89
403121	Electricity and Magnetism	0	0	2	0	1	0	2	0	1	5	6	83
403212	Heat and Thermodynamic	0	0	0	0	2	0	0	1	0	3	3	100
403241	Classical Mechanics 1	0	0	1	0	0	1	1	1	2	4	6	67
403213	Statistical Thermodynamic	0	0	0	1	0	2	1	0	1	4	5	80
403242	Theoretical Physics 2	0	0	0	0	0	0	3	0	2	3	5	60
403245	Classical Mechanics 2	0	0	0	0	1	1	4	1	0	7	7	100
403253	Atomic physics	0	0	0	0	0	0	1	1	8	2	10	20
403332	Electromagnetism 1	0	0	0	0	0	0	1	0	3	1	4	25
403346	Theoretical Physics 3	0	0	0	0	0	0	1	0	4	1	5	20
403371	Solid State 1	0	0	0	1	1	1	3	3	3	9	12	75
403342	Electromagnetism 2	0	0	0	0	0	0	1	1	4	2	6	33
403345	Quantum Mechanics 2	0	0	3	1	0	1	4	1	1	10	11	91
403361	Nuclear Physics 1	0	0	1	0	1	2	8	2	0	14	14	100
403382	Workshop	0	0	0	0	1	0	2	1	1	4	5	80
403383	Computer	0	0	0	0	0	1	0	0	1	1	2	50
403423	Electronics	0	0	0	0	2	0	3	5	0	10	10	100
403432	Advanced Optics	0	0	1	0	0	0	0	0	0	1	1	100
403462	Radiation Physics	0	0	0	0	0	1	1	2	4	4	8	50
403471	Semiconductor	1	1	1	0	0	0	0	0	0	3	3	100
403461	Nuclear Physics 2	0	0	0	0	0	0	1	2	0	3	3	100
403463	Nuclear Technology	0	0	0	0	0	0	2	1	0	3	3	100
403462	Radiation Physics	0	0	0	0	0	1	1	2	4	4	8	50
403200	Traditional Physics	1	0	13	6	16	17	9	13	29	75	104	72
403201	Electromagnetism(1)	1	0	1	1	1	0	2	0	1	6	7	86

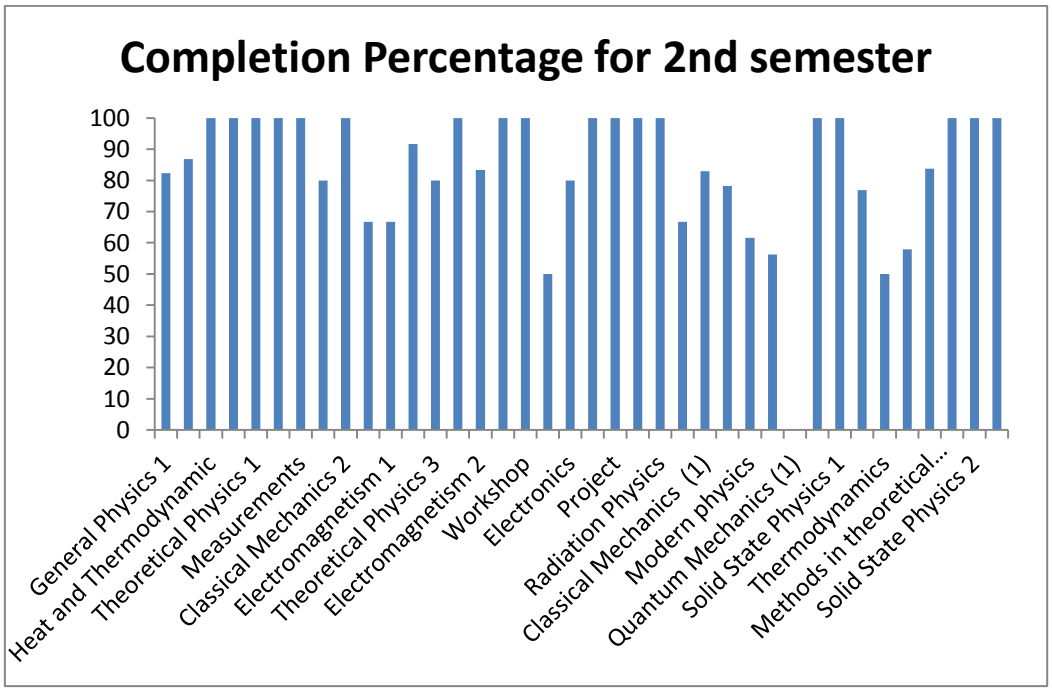
403350	Modern physics	0	0	1	0	0	0	1	0	0	2	2	100
403232	Optics	0	0	1	1	2	3	2	1	4	10	14	71
403344	Quantum Mechanics (1)	2	0	2	2	1	1	6	3	2	17	19	89
403345	Quantum Mechanics(2)	0	0	3	1	0	1	4	1	1	10	11	91
403210	Thermodynamics	1	0	0	1	4	6	4	9	19	25	44	57
403243	Methods in theoretical physics (1)	1	0	4	1	9	1	22	11	36	49	85	58
403473	Electronics	0	0	0	2	0	1	0	0	0	3	3	100
403471	Semiconductor Physics	1	1	1	0	0	0	0	0	0	3	3	100
403472	Solid State Physics 2	1	1	1	0	0	0	4	0	0	7	7	100
403463	Nuclear Models	0	0	0	0	0	0	2	1	0	3	3	100
403446	Quantum Mechanics (3)	0	0	0	0	0	0	2	1	0	3	3	100
403493	Project	0	2	0	0	0	0	0	0	0	2	2	100
Total										**174**	**576**	**750**	



Analysis for the 2nd Semester 2015-2016

Code	Course Title	A	A +	B	B +	C	C +	D	D +	Not complete	Complete	Sum	Comp. %
403101	General Physics 1	6	2	1	2	1	1	0	1	3	14	17	82
403102	General Physics 2	22	18	29	24	32	30	59	30	37	244	281	87
403212	Heat and Thermodynamic	0	0	0	0	1	0	1	0	0	2	2	100
403231	Optics	0	0	1	0	0	1	0	0	0	2	2	100
403240	Theoretical Physics 1	0	0	0	0	3	0	0	1	0	4	4	100
403241	Classical Mechanics 1	0	0	0	0	1	0	2	0	0	3	3	100
403285	Measurements	0	0	2	1	1	0	0	0	0	4	4	100
403213	Statistical Thermodynamic	1	0	0	0	0	2	1	0	1	4	5	80
403245	Classical Mechanics 2	0	0	0	0	1	0	1	0	0	2	2	100
403253	Atomic physics	0	0	0	0	0	1	1	2	2	4	6	67
403332	Electromagnetism 1	0	0	0	0	1	0	2	1	2	4	6	67
403344	Quantum Mechanics 1	0	0	1	1	1	1	5	2	1	11	12	92
403346	Theoretical Physics 3	0	0	0	0	0	0	3	1	1	4	5	80
403371	Solid State 1	0	0	0	0	0	0	2	0	0	2	2	100
403342	Electromagnetism 2	0	0	0	1	1	0	2	1	1	5	6	83
403361	Nuclear Physics 1	0	0	0	0	1	1	3	1	0	6	6	100
403382	Workshop	1	0	0	0	0	1	0	0	0	2	2	100
403383	Computer	1	0	0	0	0	0	1	0	2	2	4	50
403423	Electronics	0	0	0	0	0	0	2	2	1	4	5	80
403471	Semiconductor	0	0	0	1	0	0	0	1	0	2	2	100
403493	Project	0	1	5	1	0	1	0	0	0	8	8	100
403461	Nuclear Physics 2	0	0	1	0	0	0	1	1	0	3	3	100
403462	Radiation Physics	0	0	2	0	4	0	5	2	0	13	13	100
403200	Traditional Physics	0	0	0	0	1	2	0	3	3	6	9	67
403220	Classical Mechanics (1)	6	1	8	5	8	5	4	2	8	39	47	83

403201	Electromagnetism(1)	0	0	3	1	5	3	3	3	5	18	23	78
403350	Modern physics	1	0	0	0	0	0	7	0	5	8	13	62
403232	Optics	0	0	0	0	1	3	3	2	7	9	16	56
403344	Quantum Mechanics (1)	0	0	0	0	0	0	0	0	1	0	1	0
403345	Quantum Mechanics(2)	0	0	0	0	0	0	3	1	0	4	4	100
403370	Solid State Physics 1	1	0	0	1	0	0	0	0	0	2	2	100
403211	Statistical Thermodynamics	0	0	0	0	1	1	5	3	3	10	13	77
403210	Thermodynamics	0	0	1	1	0	0	0	0	2	2	4	50
403243	Methods in theoretical physics (1)	1	0	0	0	3	1	3	3	8	11	19	58
403244	Methods in theoretical physics (2)	0	1	0	1	3	1	21	9	7	36	43	84
403471	Semiconductor Physics	0	0	0	0	1	0	4	0	0	5	5	100
403472	Solid State Physics 2	0	1	0	0	1	1	1	1	0	5	5	100
403463	Nuclear Technology	0	0	1	0	1	2	3	0	0	7	7	100
Total											511	611	



2. Analysis of Significant Results or Variations.

List any courses where completion rates, grade distribution, or trends are significantly skewed, high or low results, or departed from policies on grades or assessments. For each course indicate what was done to investigate, the reason for the significant result, and what action has been taken.

Course	Significant result or variation
First semester	
1. Heat and Thermodynamic	Completion rate 100%
2. Classical Mechanics 2	Completion rate 100%
3. Nuclear Physics 1	Completion rate 100%
4. Electronics	Completion rate 100%
5. Advanced Optics	Completion rate 100%
6. Semiconductor	Completion rate 100%
7. Nuclear Physics 2	Completion rate 100%
8. Nuclear Technology	Completion rate 100%
9. Modern physics	Completion rate 100%
10. Electronics	Completion rate 100%
11. Semiconductor Physics	Completion rate 100%
12. Solid State Physics 2	Completion rate 100%
13. Nuclear Models	Completion rate 100%
14. Quantum Mechanics (3)	Completion rate 100%
15. Project	Completion rate 100%
Second semester	
1. Heat and Thermodynamic	Completion rate 100%
2. Optics	Completion rate 100%
3. Theoretical Physics 1	Completion rate 100%
4. Classical Mechanics 1	Completion rate 100%
5. Measurements	Completion rate 100%
6. Classical Mechanics 2	Completion rate 100%
7. Solid State 1	Completion rate 100%
8. Nuclear Physics 1	Completion rate 100%
9. Workshop	Completion rate 100%
10. Semiconductor	Completion rate 100%
11. Project	Completion rate 100%
12. Nuclear Physics 2	Completion rate 100%
13. Radiation Physics	Completion rate 100%
14. Quantum Mechanics(2)	Completion rate 100%
15. Solid State Physics 1	Completion rate 100%
16. Semiconductor Physics	Completion rate 100%
17. Solid State Physics 2	Completion rate 100%
18. Nuclear Technology	Completion rate 100%

Investigation undertaken
- Students' answer papers has been checked by the quality committee
- Course questionnaire has been applied

Reason for significant result or variation
- Number of students may be low in the course
- Students may be well trained for the exams
- Up- or Down scaling may affect the reality of the results

Action taken (if required)
- Involving questions that measure the high levels of skills
- Preventing questions' repetition in the exams

b. Course	Significant result or variation
1. Atomic physics	20%
2. Electromagnetism 1	25%

3. Theoretical Physics 3 4. Electromagnetism 2 5. Quantum Mechanics (1)	20% 33% 0%

Investigation undertaken
- Students' answer papers has been checked by the quality committee
- Course questionnaire has been applied

Reason for significant result or variation
- The low level of mathematical skills with the students
- Number of students may be low in the course

Action taken (if required)

(Attach additional summaries if necessary)

4. Delivery of Planned Courses

(a) List any courses that were planned but not taught during this academic year and indicate the reason and what will need to be done if any compensating action is required.

Course title and code	Explanation	Compensating action if required

(b) Compensating Action Required for Units of Work Not Taught in Courses that were Offered. (Complete only where units not taught were of sufficient importance to require some compensating action)

Course	Unit of work	Reason
Compensating action if required		

Course	Unit of work	Reason
Compensating action if required		
Course	Unit of work	Reason
Compensating action if required		
Course	Unit of work	Reason
Compensating action if required		

E- Program Management and Administration

List difficulties (if any) encountered in management of the program	Impact of difficulties on the achievement of the program objectives	Proposed action to avoid future difficulties in Response
- Weakness of the English language and mathematics as a direct results of public education	- Has a severe impact on the level of graduates	- A request that English course is extensively taught in the preparatory year.

- Limited availability of modern scientific instruments in comparison with the recent scientific development.	- There is a gap between the fundamentals that students learn and modern devices in the work field	- Laboratories will undergo major development
- The number of faculty members is not sufficient in the female section	- Teaching overload affect the research activities	- Increase number of faculty member - Encourage members of teaching assistants to end the theses to participate in the teaching

F. Summary Program Evaluation :

1. Graduating Students Evaluation (To be reported on in years when surveys are undertaken)
Date of Survey : **12/05/1437 H**
Attach survey report

a. List most important recommendations for improvement, strengths and suggestions	Analysis (e.g. Assessment, action already taken, other considerations, strengths and recommendation for improvement.)
• Preparing a list of difficulties that encountering the students in the practical field and increasing the workshops of researching skills • E-learning workshops are regularly arranged to increase students' skills • Encouraging the staff members to develop appropriate strategies to improve their teaching performance.	**1- Criticism:** • Ineffectiveness of the program in some practical fields. • Failure to provide adequate extracurricular activities. • Lack of students' usage of E-learning **2- Strengths:** • The staff members are highly expert to teach the contents of the courses. • The staff members work with high spirit and able to perform a lot of work. • The staff members are interested in the development of the students' academic level. • The program develops the knowledge and skills of students to enable them to perform their future duties.

b. Changes proposed in the program (if any) in response to this analysis and feedback.

2. Other Evaluation (e.g. Evaluations by employers or other stakeholders, external review)
Not Applicable
-
Describe evaluation process

Attach review/survey report

a. List most important recommendations for improvement, strengths and suggestions for improvement. -	(e.g. Analysis of recommendations for improvement: Are recommendations valid and what action will be taken, action already taken, or other considerations?)
b. Changes proposed in the program (if any) in response to this feedback.	
2. Ratings on Sub-Standards of Standard 4 by program faculty and teaching staff; 4.1 to 4.10.	
(a) List sub-standards. Are the "Best Practices" followed; Yes or No? Provide a revised rating for each sub-standard. Indicate action proposed to improve performance (if any).	

Sub-Standards	Best Practices Followed (Y/N)	5 Star Rating	List priorities for improvement.
4.1 Student Learning Outcomes Intended student learning outcomes must be consistent with the National Qualifications Framework, and with generally accepted standards for the field of study concerned, including requirements for any professions for which students are being prepared.	Yes	***	• A committee for developing courses in the department has been prepared to review the present courses and put the plan of development for usage of modern teaching methods instead the traditional one.
4.2 Program Development Processes Programs must be planned as coherent packages of learning experiences in which all courses contribute in planned ways to the intended learning outcomes for the program.	Yes	***	• A departmental consultation committee in cooperation with experts of similar regional and international programs, which have been accredited, review annually the program specifications and set benchmarks for program performance refining
4.3 Program Evaluation and Review Processes The quality of all courses and of the program as a whole must be monitored regularly through appropriate evaluation mechanisms and amended as required, with more extensive quality reviews conducted periodically.	Yes	***	• Development of appropriate and reliable procedures of direct and indirect assessments for reviewing both the courses and the program as a whole periodically.
4.4 Student Assessment Student assessment processes must be appropriate for the intended learning outcomes and effectively and fairly administered with independent verification of standards achieved.	Yes	***	• Organization of workshops by educational specialists and experts to increase for increase staff teaching and educational experience and capabilities using modern techniques • Developing independent assessment to measure the performance students' duties personally.

4.5 Educational Assistance for Students Effective systems must be in place for assisting student learning through academic advice, study facilities, monitoring student progress, encouraging high performing students and provision of assistance when needed by individuals.	Yes	***	• 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. • Future plans for purchasing, renewing and maintenance of the labs equipment, in addition to educational books and other teaching aids.
4.6 Quality of Teaching Teaching must be of high quality with appropriate strategies used for different categories of learning outcomes.	Yes	***	• Encourage staff members to use modern and advanced teaching strategies to ensure the achievement of ILOs • Reviewing the course outcomes to renew the course materials according to the changes in the field of information
4.7 Support for Improvements in Quality of Teaching Appropriate strategies must be used by the program administrators and teaching staff to support continuing improvement in quality of teaching.	Yes	***	• Organizing and provision of training courses in the area of modern strategies and skills of teaching within the department & college to encourage staff members improving their teaching performance.
4.8 Qualifications and Experience of Teaching Staff Teaching staff must have qualifications and experience necessary for teaching the courses they teach, and keep upto date academic and / or professional developments in their fields.	Yes	****	• All the staff members in the program are highly qualified, employed on a full time basis and remain up to date with the latest related knowledge. • All staff members sharing in weekly scientific lecture in order to update their information in research. • The staff members share in annual conferences and workshops.
4.9 Field Experience Activities In programs that includes field experience activate, the field experience activities must be planned and administrated 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.	Yes	***	• Preparing a list of difficulties that encountering the students in the practical field.
4.10 Partnership Arrangements with Other Institutions	No		There is no partnership with other departments or institutions.
Analysis of Sub-standards. List the strengths and recommendations for improvement of the program's self-evaluation of following best practices.			

G- **Program Course Evaluation:** See the different questionnaires

1. List courses taught during the year. Indicate for each course whether student evaluations were undertaken and/or other evaluations made of quality of teaching. For each course indicate if action is planned to improve teaching.

Course Title/Course Code		Student Evaluations		Other Evaluation (specify)	Action Planned	
		Yes	No		Yes	No
403101	General Physics 1	√		Exam Satisfaction questionnaire	Yes	

403102	General Physics 2	√				
403121	Electricity and Magnetism	√				
403212	Heat and Thermodynamic	√				
403231	Optics	√				
403240	Theoretical Physics 1	√				
403241	Classical Mechanics 1	√				
403285	Measurements	√				
403213	Statistical Thermodynamic	√				
403242	Theoretical Physics 2	√				
403245	Classical Mechanics 2	√				
403253	Atomic physics	√				
403332	Electromagnetism 1	√				
403344	Quantum Mechanics 1	√				
403346	Theoretical Physics 3	√				
403371	Solid State 1	√				
403342	Electromagnetism 2	√				
403345	Quantum Mechanics 2	√				
403361	Nuclear Physics 1	√				
403382	Workshop	√				
403383	Computer	√				
403423	Electronics	√				
403432	Advanced Optics	√				
403462	Radiation Physics	√				
403471	Semiconductor	√				
403493	Project	√				
403461	Nuclear Physics 2	√				
403463	Nuclear Technology	√				
403372	Solid State 2	√				

See Curriculum of the Physics Program

(Add items or attach list if necessary)

2. List All Campus Branch/Locations (approved by Ministry of Higher Education or Higher Council of Education).

Campus Branch/Location	Approval By	Date
Main Campus:		
1: Umm Al-Qura Universirty/ Abedia		
2:		
3:		
4:		

List all courses taught by this program and for this program that are in other programs (if any).

See the study plan for the program

Year	Course Number	Course Code	Course Title	Required or Elective	Credit Hours	College or Department
First Year						
Semester 1						
	403101	Phys	General Physics 1	Required	4(3+1)	Department
	402101	Chem	General Chemistry 1	Required	4(3+1)	College
	404101	Math	Differentiation and Integration 1	Required	4	College
	705101	Ngm	English Language	Required	2	University
	601101	Slm	Islamic Culture 1	Required	2	University
	605101	Slm	Quran 1	Required	2	University
Semester 2						
	403102	Phys	General Physics 2	Required	4(3+1)	Department
	403121	Phys	Electricity and Magnetism	Required	4(3+1)	Department
	404102	Math	Differentiation and Integration 2	Required	4	College
	404140	Math	Algebra Fundamental	Required	4	College
	401101	Biol	General Biology Plant	Required	2	College
	401102	Biol	General Biology Animal	Required	2	College
Second Year						
Semester 1						
	403212	Phys	Heat and Thermodynamic	Required	3	Department
	403231	Phys	Optics	Required	4(3+1)	Department
	403240	Phys	Theoretical Physics 1	Required	3	Department
	403241	Phys	Classical Mechanics 1	Required	4	Department
	403285	Phys	Measurements	Required	3	Department
	501101	Arb	Arabic Language	Required	2	University
Semester 2						
	403213	Phys	Statistical Thermodynamic	Required	3	Department
	403242	Phys	Theoretical Physics 2	Required	3	Department
	403245	Phys	Classical Mechanics 2	Required	3	Department
	403253	Phys	Atomic physics	Required	4 (3+1)	Department
	705102	Ngm	Communication in English 1	Required	3	University
	601201	Slm	Islamic Culture 2	Required	2	University
Third Year						
Semester 1						
	403332	Phys	Electromagnetism 1	Required	3	Department
	403344	Phys	Quantum Mechanics 1	Required	4	Department
	403346	Phys	Theoretical Physics 3	Required	2	Department
	403371	Phys	Solid State 1	Required	3	Department
	601301	Slm	Islamic Culture 3	Required	3	University
	605201	Slm	Quran 2	Required	2	University
Semester 2						
	403342	Phys	Electromagnetism 2	Required	3	Department
	403345	Phys	Quantum Mechanics 2	Required	3	Department
	403361	Phys	Nuclear Physics 1	Required	4(3+1)	Department
	403382	Phys	Workshop	Required	2	Department
	403383	Phys	Computer	Required	2	Department

	705103	Ngm	Communication in English 2	Required	3	University
	601401	Slm	Islamic Culture 4	Required	2	University
Fourth Year						
Semester 1						
	403423	Phys	Electronics	Required	4(3+1)	Department
	403432	Phys	Advanced Optics	Required	3	Department
	403462	Phys	Radiation Physics	Required	3	Department
	403471	Phys	Semiconductor	Required	3	Department
	403493	Phys	Project	Required	5	Department
	605301	Slm	Quran 3	Required	2	University
	102101	Slm	Alsera Alnabaweia	Required	2	University
Semester 2						
	403461	Phys	Nuclear Physics 2	Required	3	Department
	403463	Phys	Nuclear Technology	Required	2	Department
	403372	Phys	Solid State 2	Required	2	Department
	605401	Slm	Quran 4	Required	2	University

3. Program Learning Outcome Assessment. Design a program learning outcome assessment plan using the NCAAA accreditation four year cycle. By the end of the four year cycle all program learning outcomes are to be assessed using KPIs with benchmarks and analysis, national or international standardized testing if available, rubrics, exams and grade analysis, or some alternative scientific measure of student performance.

See the courses report and specification of the Program.

KPI #	NQF Learning Domains and Learning Outcomes	Method of Assessment	Date of Assessment
1.0	**Knowledge**		
	1.1 Understand relevant of knowledge and theory in other related disciplines and professional fields 1.2 Recognize facts, principles and concepts of classical physics (mechanics, electrodynamics, thermodynamics, vibrations, waves and optics) and are familiar with the fundamentals of quantum, atomic, nuclear, and solid state physics. 1.3 Describe concepts, Procedures of matching the principles and the concepts to analyse problems within specific core areas and theories.	Quizzes. Homework. Tests Project . Exams	Date of lectures All the semester weeks
2.0	**Cognitive Skills**		
	2.1 Apply skills when asked (discuss how to overcome educational problems) 2.2 Gain mental calculating skills by training them on it 2.3 Solve problems in Physics by using suitable mathematical principles 2.4 Analyze and interpret quantitative results 2.5 Gain the skills of solving scientific problems related to industrial problems	Practical Presentation Seminars Discussions Reports Oral tests Written tests	Date of lectures All the semester weeks
3.0	**Interpersonal Skills & Responsibility**		

3.1 Show Responsibility for self-learning to be aware with recent developments in Physics 3.2 Work effectively in groups and exercise leadership when appropriate. 3.3 Act as professional and responsible person. 3.4 Recognize life-long learning is a necessity as well as a responsibility of every Graduate	Oral exams. Lab. Exam Helping each other in doing their experiments. Giving clear and logical arguments	Date of lectures
4.0	**Communication, Information Technology, Numerical**	
4.1 Communicate effectively in oral and written form 4.2 Collect and classify the material for a course 4.3 Use basic physics Terminology in English 4.4 Acquire the skills to use the internet communicates tools.	Surveys Practical exams. Written exams. E learning Homework	Date of lectures
5.0	**Psychomotor**	
5.1 Use a perfect experimental tools to solve Physics problems in the Labs 5.2 Employ software skills.	E learning Practical exams.	Date of lectures

Provide an analysis of the Four (five/six) Year Program Learning Outcome Assessment Cycle (List strengths and recommendations). Provide "direct assessments" for the current year's program learning outcomes, according to the dates provided above outcomes are to be assessed and reported in the ***Annual Program Report***(s). Normally a program has 6 to 8 program learning outcomes. Therefore 1 to 3 learning outcomes are directly assessed each year.

The KPI table is used to document directly assessed program learning outcomes. Assessments methods may include: national or international standardized test results, rubrics, exams and grade analysis, or learning achievement using an alternative scientific assessment system (copy the ***KPI Assessment Table*** and paste to make additional tables as needed).

KPI Assessment Table (Institutionally approved for the program)

KPI # _____ Program KPI: _____ **_____**	
Assessment Year _____ Program Learning Outcome: _____ **_____** **_____**	
NQF Learning Domain	
Target Benchmark	
KPI Actual Benchmark	
Internal Benchmark	
External Benchmark	
New Target Benchmark	
Analysis: (List strengths and recommendations)	

3. Orientation programs for new teaching staff Orientation programs provided? Yes ✓ No If offered how many participated? All Members
a-Brief Description At the beginning of every academic year the Quality and Development Deanship arrange an introductory program for the new staff
b. List recommendations for improvement by teaching staff. Extra training courses are needed in specific areas like E-learning, and website managements

c. If orientation programs were not provided, give reasons.

4. Professional Development Activities for Faculty, Teaching and Other Staff a. Activities Provided	How many Participated	
	Teaching Staff	Other Staff
4. Professional Development Activities for Teaching staff and Others Staff a. Organized Activities		
Radiation Protection	12	
Health and Occupational Safety	14	
Application Skills	2	
Legal and Financial Aspects in University Environment	1	
Exams and Student Evaluation System	1	
Credit Hours System	1	
Conference Organization	1	
Training course for the New Academic Faculty Members	1	
University education strategy	1	
Active Education	1	
Evaluation Methods	1	
b. Summary of the comments concerning the effectiveness of the later activities based on participants evaluations The performance of teaching process is developed affecting the student learning outcomes. This development includes workshop related to the usage of Saudi digital library, e-learning assessment and usage of mix teaching methods (traditional and online)		

H.

1. Matters Raised by Evaluator Giving Opinion	Comment by Program Coordinator
2. Implications for Planning for the Program	