

# Welcome in the Faculty of Applied Science







Bachelor of Biological Science Department of Biology Faculty of Applied Science

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# ANNUAL PROGRAM REPORT



ACADEMIC YEAR 1437-38





ATTACHMENT 2 (c)

**Annual Program Report** 

Kingdom of Saudi Arabia

The National Commission for Academic Accreditation & Assessment

# ANNUAL PROGRAM REPORT

BSc Biology (40100) (2016/2017)





**<u>Program Eligibility</u>**: 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: 02 / 03 / 1439 H (20 / 11 / 2017)
2. College/ Department: Faculty of Applied Science	e / Department of Biology
3. Dean: Dr. Waleed J. Altaf	
4. List All Campus Branch/Locations (approved by	Ministry of Higher Education or Higher Council of
Education).	

Campus Branch/Location	Approval By	Date
1: Main Campus in Al-'Abdiyah		01/01/1402 H
2: Second Campus in Al-Zahir	Ministry of Higher Education	29 /10/ 1981
3: Third Campus in Al-Azizia		1427 H

#### A. Program Identification and General Information

Program title and code
BSc Biology (40100)
Name and position of persons completing the APR
Dr. Yasser El Marwei (Head of Biology Department)
Dr. Mohamed El-Baqami
Dr. Kadry Abdelkhalik
Dr. Hanan Osman
Dr. Randa ElBasat
Dr. Doaa Shehata
Academic year to which this report applies.
1437/1438 H (2016 - 2017)





# **B** Statistical Information

1. Number of students who started the program in the year concerned 116		
2. (a) Number of students who completed the program in the year concerned: 54		
Completed the final year of the program: 54		
Completed major tracks within the program (if applicable) N/A		
TitleNo		
TitleNo		
TitleNo		
Title No		
2. (b) Completed an intermediate award specified as an early exit point (if any) N/A		
3. Apparent completion rate.		
<ul> <li>(a) Percentage of students who completed the program,</li> <li>(Number shown in 2 (a) as a percentage of the number that started the program in that student intake.) N/A</li> </ul>		
(b) Percentage of students who completed an intermediate award (if any) (e.g. Associate degree within a bachelor degree program) $N/A$		
(Number shown in 2 (b) as a percentage of the number that started the program leading to that award in that student intake).		
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).		
Some Students transferred their study to other programs within the same Faculty after completing the first academic year in Biology Program. Others may have been re-enrolled in other subsequent year as they may had withdrawn one semester or more then re-enrolled again. Moreover, the students who changed their study from other programs such as mathematics program to Biology Program may also affect the completion rates. Also, another apparent factor which is the differences in the teaching staff who teaching the same course		

within the different branches and between main campus and the other branches of Female

**Students.** 





In addition, the best high school students proffered to study professional areas such as Medicine, Engineering and computer Sciences more than Biology Program.

4. Enrollment Management and Cohort Analysis (Table 1)

**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** here 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** (Illustration): **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). The report is to cover the past four years. Update the years as needed.

					CURRENT YEAR
Student Category	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
Total cohort enrollment**	10	18	72	80	116
Retained till year end	7	9			
Withdrawn during the year and re- enrolled the following year	3	9			
Withdrawn for good	0	0			
Graduated successfully	5	0	In progress	In progress	In progress

## **Enrollment Management and Cohort Analysis (Table 1)**

\* PYP - Preparatory Year Program

\*\*overall enrollment to the UQU PYP in Science and Engineering pathway is ranging from 1100 to 1200 male student every year, however the figures shown in the above table (total cohort enrollment) represents those who pass the PYP and chose to enroll in the Biology program.



95%

Response Rate %



7. Destination of graduates as shown in survey of graduating students (Include this information in years in which a survey of employment outcomes for graduating students is conducted).

Date of Survey: 04/02/1439H (24/10/2017)

130

Number Surveyed

Number Responded

123\*

Destination	Not Available for Employment		Available for Employment		
	Further Study	Other Reasons	Employed in Subject Field	Other Employment	Unemployed
Number	15	6	4	2	96
Percent of Respondents	12%	5%	3 %	2%	78%

\* This number responded for the surveys was 121 female students and 2 male students.

Analysis: List the strengths and recommendations

The rate of employment is low as the most of responded students were females, as many of them got married and become housewives. Other reason for the decrement of employment rate is that they are waiting for jobs.

# Strengths:

- 1. The study in English won the admiration of a number of students.
- 2. The practical was very helpful and helped make sense of the theory.
- 3. Study of courses within the Biology Program is very interesting and informative
- 4. The teaching staff members have a great knowledge of content of courses they are teaching and they are very supportive, cooperative and ready to help
- The program helped me to develop my skills further, broaden my knowledge and 5. expand my portfolio of professional experience.
- 6. I believe the experiences I have had during my time as a Career Ready student have provided me with many valuable skills, expanded my professional network and prepared me well for the world of work
- 7. The percentage of those who agree on the program has increased to 87%, while 7% expressed reservations on the program while the percentage of 6% consenting to some extent.
- 8. Working within teamwork in graduation projects, curricular and extracurricular activities helped me to develop interpersonal skills. Working with others to coordinate schedules, meet deadlines and make decisions have strengthen my relational interactions.
- 9. Administrative procedures are Easy and quickly especially that are done through electronic transactions using the university website.





## **Recommendations:**

- 1. Updating the curriculum study plan in order to adding the most recent courses within Biology program specialization and updating the content and credit hours of the existing courses.
- 2. Students prefer to study courses in English language in order to be qualified to conducting their post-graduate studies.
  - Updating the biology program curriculum plan along with course specification for course which share similar topics in order to prevent repeating of some topics within different courses.
- **3.** More attention required for updating instruments and tools and maintaining the Biology labs to help students study the various practical applications.
- 4. More attention required for information technology (IT) services and facilities available for students.
- 5. Provide an environment where students are more likely to express their ideas, promote creativity and challenge problems with innovative solutions and most importantly learn faster and more effectively using modern interactive learning tools.
- 6. Schedule of regular meetings to follow up on graduates of the program in their work within these institutions and to clarify the way of updating the program which is useful for graduates helping them in development of their work.
- 7. Enhancing the active learning strategies and to include the research project as a graduation requirement.
- 8. Biology specialization needed to be more adequate to the labor market by including more updating disciplines such as that applied within the international biology programs.
- 9. Periodical training for teaching assistants and technicians working in Biology labs in order to be more qualified with dealing with the new instruments and tools.

#### C. Program Context

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

- 1) Biology Department is currently working on its "Accreditation Project" which demands improvement in Quality Assurance, international collaboration at program level and improvement in the program itself to be at par with international requirements like service learning and Interprofessional Education.
- 2) Biology program is applying for international accreditation (ASIIN) which will improve the educational process in the department.
- 3) Due to a number of drawbacks of the application of UQU PYP for the Science and Engineering pathway during the past four years, that affected the overall number of students enrolled in the various programs provided by all departments (e.g. Biology; Chemistry; Physics and Mathematical Sciences), the Faculty of Applied Sciences by unanimous votes of the department members and by the Faculty council members,





decided to withdraw from the UQU PYP program, that means the Faculty of Applied Science will enroll fresh students directly into its programs after graduating from high school, subject to achieving the UQU requirements for admission in the university.

- 4) UQU has implemented policy for all programs and colleges to start and keep liaison with prospective students admitted in Prep year, to enhance awareness among the students regarding program requirements in various domains of learning like knowledge, skills and attitude, to enhance their preparedness for the specific program.
- 5) Introducing and promoting E-Learning methods, to replace the traditional teaching methods. For this reason, most of academic staff members will be trained to use such teaching technology.
- 6) In the academic year (1432/33), the Biology department changed the old curriculum in the main campus by dropping some courses and expanded a list of professional courses in the new curriculum. The new curriculum was applied within the female Azizyia campus within the next academic year (1433/34).
- 7) The new curriculum has some changes for the prerequisites and co-requisites for some courses.

The policy of Faculty of Applied Science to enroll new students into the main four programs, i.e.:

BSc Biology (40100) - BSc Chemistry (40200) BSc Physics (40300) - BSc Mathematics (40400)

Students who are willing to enroll in the (male section only): BSc Microbiology (40201) - BSc Industrial Chemistry (40206) BSc Medical Physics (40301)

It is important to mention that the Faculty of Applied Science has adopted a PYP-like first year for all seven programs, that can make transfer between majors and program is easy for students without costing them delays in the time required to complete their studies. The table below explains the study plan of the first year of all seven programs provided by the Faculty of Applied Science.

	First year						
	Lev	vel 1			Lev	vel 2	
S	Course code	Course title	Credit hours	S	Course code	Course title	Credit hour
1	Calculus	4041101	4	1	<b>General Biology</b>	4011101	4
2	General Chemistry	4021101	4	2	General Physics	4031101	4
3	General English	7001401	4	3	English for Science	7001402	4
4	Holy Quran		2	4	Arabic Language		2
5	Islamic Culture		2	5	Biography of the Prophet		2
	Total		16		Total		16



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The proposed withdraw from UQU PYP program shall take effect next academic year (1439/1440 H) corresponding to (2018 – 2019).

Implications for the program

There will be a number of positive implications on the BSc Biology program following the withdrawal from UQU PYP Science and Engineering Pathway, these include:

(1)- Updating the study plan of the BSc Biology program, taking into consideration the suggestions and comments and recommendations from alumni surveys; current students and teaching staff surveys; benchmark comparisons with local, regional and international programs.

(2)- The quality of students to be enrolled will be better, as direct enrolment to the program is not available. Students shall at least achieve a minimum of (2.0) out of (4.0) GPA (in the main campus only) in their first year in the main Faculty of Applied Science Programs (i.e. B.Sc. Biology; BSc Chemistry; BSc Physics and BSc Mathematics) before being enrolled in the BSc Microbiology Program.

(3)- Students who are changing majors within the Faculty of Applied Science programs (for male students) will not be affected in terms of their completion time as the first year of all seven programs is identical. It is PYP-like year where all students study the same courses regardless of their program in which they were enrolled.

(4)- Some sub-specialties were added that are compatible with the labor market.

(5)- Attempt to rehabilitate the students in terms of field training in community institutions that fit the specialties of the program.

(6)- Improvement of the learning process especially practical applications in the new labs.

(7)- Improvement of the university environment and facilities.

(8)- Increase the possibility to execute more biotechnology techniques and researches.

(9)- The program challenged to graduate competitive and qualified students.

(10)- The staff members of Biology Department have written and implemented its assessment plan to asses:

a. Achievement of course objectives and learning outcomes in all learning domains as per National Qualification Framework criteria.

**b.** Achievement of program objectives after each semester and yearly

c. Achievement of mission related, non-curricular objectives of the program.

(11)- The department implemented service learning through scientific campaigns within the department for students and faculty staff members which improved students' skills and professionalism.

(12)- E-Learning methods are being introduced; some of the present staff will be trained to teach using these new methods.

(13)- Some courses will be planned for being processed as digital electronic courses.

(14)- Deficiency of the practical part of some courses within the female branch at Azizyia campus due to it isn't well equipped and not well developed for lab courses.

(15)- Difficulties of registration for some students decreased remarkably.





2. Significant changes external to the institution affecting the program (if any) during the past year. 1. Growing demand of higher education in Saudi which increased annually with a significant rate. 2. Insufficient confidence of the community about programs offered by the Faculty of Applied Sciences that do not qualify for admission to the labor market with high salaries. 3. Intend of the students' parents of the unified scientific track to enrol in the medical, engineering and computer programs sectors. 4. New research facilities and equipment continually added to the department 5. The significant progress in the field of information technology which gives more challenges for the students and staff of teaching in terms of continuous training and development and in terms of the way of learning (Self-Learning). 6. Significant development in the local national economy. 7. Communication technology such as the internet and networking. Implications for the program Significant development within several universities in Saudi Arabia and also the great encouragement of local administration for universities to continue this remarkable development. E-learning methods are planned to being used in teaching process which enhancing the communication between students and academic staff. Activation of decision field training in the new plan, which helps to increase job opportunities for graduates of the program. **D.** Course Reports Information Summary Course Reports Results. Describe and analyze how the individual NCAAA course reports are utilized

Course Reports 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.

- At the beginning of each semester:
  - a) The module coordinators are decided and provided with the approved module specification to be taught.
  - b) This module specification along with assessment rubrics and any other relevant information are provided to all the students taking that module.
  - c) One of the main responsibility of the module coordinator is to ensure the timely and uniformly delivered and assessment of the module at all the sections it is being taught in that particular semester.





d) The module coordinator after consultation with all the teachers send recommendations in the course report regarding revision of the module learning outcome, revision of the assessment mode, modification of course content, requirements for special tools/equipment for implementing the module objectives or any other difficulty faced during that semester. The course report is then deliberated upon by the Academic Advisory Committee, **e**) **Quality Assurance Committee and the Department Council.** If required an internal/external expert committee is constituted for module evaluation. **f**) g) Annually as part of indirect assessment of learning outcomes, various surveys are conducted to take the opinion of all the stakeholder; including, the student, faculty employers, administrators and the community. h) Based on both recommendations, if required, the department council sends a request for modification in the aforesaid module to the |College/University Council. The students are provided with the details of the module objectives and specification **i**) at the beginning of the semester. j) The students are asked to provide their feedbacks, suggestions and opinions in various surveys conducted by the quality assurance unit. k) The feedback is also obtained from students during the final exams to receive the opinions about the questions which are put up after accomplishment of the respective exams. The individual course reports along with a number of strengths and weaknesses that can be extracted from it, by which it can provide vital information to assess the program. Each staff member has to fulfill the course report form related to his teaching load. And detect the problems encountered through the teaching process and discussed fully in the department council to take a decision about it. Individual course reports are used for evaluation of course as well as the program. The lecturer is supported by one of the staff for assessment of achievement of course objectives and assessment of program objectives. The instructor provides the following to Assessment Committee for analysis. 1) Mapped copy of final exam. 2) Table indicating Questions assessing each course objective. For example: Questions assessing Course |Objective A: Q.# 1, 3, 5, 6, 9 ..... i. ii. Questions assessing Course |Objective B: Q.# ..... Questions assessing Course |Objective C: Q.# ..... iii. Questions assessing Course |Objective D: Q.# ..... iv. Questions assessing Course |Objective E: Q.# ..... v.





- 3) Copies of Graded exams (which represented 10% of total graded exams that are selected randomly)
- Key performance indicator (KPI): the assessment committee works out for assessment of achievement of all course objectives and in turn, program objectives.
  - i. Course objective are considered as "achieved" if students' average grades in questions for that objective are 65% or above.
  - ii. Program objectives are considered as "achieved" if objectives of different courses leading to this program objective are achieved.
- Reporting and further planning:
  - i. The report for each course assessment data is also forwarded to the concerned department/coordinator for final course report to be discussed at faculty forum.
  - ii. If there is deficiency, the curriculum committee and the coordinator discuss the matter for the following:
    - a) Reviewing the teaching methodology for the relevant course.
    - b) Reviewing the tools of assessment (type of questions etc)
- This information can be gather from the course reports as follows:

(1)- Effectiveness of teaching strategies: this can help for identification of any difficulties in using the stated teaching strategies and the suggested action plan to improve these strategies. Difficulties in applying proper teaching strategies can hinder achieving the objectives and learning outcomes of the program.

(2)- **Result statistics:** this can help getting a wide view on how the program's objectives have achieved by identifying any abnormal results, e.g. low pass rate, skewed results (either low or high). Identifying abnormal results can help finding the reasons that influence these results and applying an action plan to improve the situation.

(3)- **Resources and Facilities:** identifying any difficulties in accessing learning resources and facilities which can help immensely in identification of any negative impact on achieving the objectives and affecting the learning outcomes.

(4)- Course evaluation by students: this type of evaluation considers as an important component of the course report that can help to highlight the strengths and weaknesses of every individual course from the students' standpoint.





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

(1.) Completion rate analysis:

Overall the average completion rate in all three semesters is above 50% which may reflect achieving the objectives and learning outcomes.

See attached completion rate statistics report for every single course and the overall average for the program.

(1.) Grade distribution analysis:

# Below is grade distribution analysis of randomly selected courses from each semester (1)- First semester (381)



Grade distribution analysis of Molecular Biology (401447-2), normal curve data is skewed to the left (negative skewness)







The chart shows the grades distribution of Endocrinology course (401482-3) within three consecutive years (2014 - 2017). As it can be seen, normal curve data is skewed to the left (negative skewness) can be observed throughout the years, as the number of high achieving students (A+, A, B+ and B) is tend to be high normally comparing to middle or low achievers (C+, C, D+ and D). The number of failing students is also observed to be low throughout the years. The overall completion rate of this course throughout the three years is more than 50% which shows no major problems associated with this course that could have impacted achieving the objectives and the learning outcomes of the course.





2.	Analysis of Significant Results or Variations (25% or more).	N/A

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.

N/A	
a. Course	Significant result or variation
Investigation undertaken	
Reason for significant result or variation	
Action taken (if required)	
b. Course	Significant result or variation
Investigation undertaken	
Reason for significant result or variation	
Action taken (if required)	
c. Course	Significant result or variation
Investigation undertaken	
Reason for significant result or variation	
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. $N/A$				
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) N/A

Course	Unit of work	Reason
Compensating action if required		



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# E Program Management and Administration

List difficulties (if any) encountered in management of the program. Labs are not well equipped	Impact of difficulties on the achievement of the program objectives. It is affected the practical and applied part for student skills development.	Proposed action to avoid future difficulties in response. Purchasing the required instruments and chemicals and upgrading the lab workplace.
The delay of student registration due to system troubles	Losing the first week of each semester in some courses	Coordination in this regard should be done before the beginning of each semester
Course cancellation by student	Some students used to cancel courses study from the lower levels which affect the student's study plan and/or study load.	Any cancellation by student should be authorized by the Dean and/or vice Dean of Academic Affairs. More efforts should be done toward academic supervision and advising.
Obvious weakness of English language for most of student of the preparatory year.	Affect student outcomes as all core courses in English.	Recruitment of highly specialized English instructors in the preparatory year. Summer intensive English courses organized by the university to the current student.
Deficiency in molecular and biotechnological instruments, chemicals and kits.	Decrease in the student practical experience and benefit.	Compensated for by movies, animations, and outside lab visits.





Some important analytical instruments are absent and the present ones need upgrading to qualify the students to the continuous laboratory development. Additionally, most of microscopes need maintenance or change and their number needs to be greatly increased. No practical access to electron microscopes with its two types as well as its co-instruments.	Diminishing learning outcomes.	Compensated for by the movies, animations, and outside lab visits at KAUST. This problem nearly solved in male campus but still exist in female campus.
Lack of unifying the exam among the three branches.	Variations in assessment tools	Unifying the exam among the three branches.
Some courses need to be merged because they are similar in some parts.	Repeating of some topics.	Change in the curriculum study plan.
Communication difficulties between female and male branches.	Inconsistency in delivering lectures and practical courses.	Organize timetable and make more meeting regarding the order of lectures and practical topics during semester.





# F. Summary Program Evaluation

1. Graduating Student Evaluations (surveys)	
Date of Surveys 4/2/1439H (24/10/2017),	
123 students responded to survey	
Attach survey reports. (Surveys attached)	
a. List most important recommendations for improvement, strengths and suggestions	Analysis (e.g. Assessment, action already taken, other considerations, strengths and recommendation for improvement.)
1) New courses are designed to be added for the curriculum study plan of Biology Program.	<ol> <li>The new study plan includes new courses such as Immunology and Molecular Biology. Other courses such as "laboratory techniques and instruments" and "Biological analysis" were removed from the new study plan and its content was included within other relevant new courses.</li> </ol>
2) Include scientific trips in courses like visiting Faqih Aquarium to sea live invertebrates and vertebrates' genera.	2) Scientific trips for related work places during the semester and prior to field training course is a very good idea and will be taken into consideration
3) Improvement in the use of the advanced learning aids.	<ul><li>3) Supply the classrooms by smart boards and projectors.</li></ul>
<ul> <li>4) Increasing the number of homework to help students search for information.</li> <li>5) There was lack of material for practical</li> </ul>	<ul> <li>4) Extracurricular activities were suggested to be included in each course.</li> </ul>
sessions as the biology labs need a lot of improvement in terms of equipment and chemicals.	5) As this report is prepared, an application is being prepared to equip all the laboratories in the Department of Biology. The Application was granted around SAR 3000,000 to purchase new lab equipment. The specifications and quantities of each equipment was submitted to the UQU vice rector in December 25 <sup>th</sup> , 2016. Another application was submitted for purchasing the required chemicals, glassware and laboratory disposable.





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

(1)- The study plan is updated and new courses were added and the course content of existing courses is updated. Taken into consideration local and international benchmarking (similar programs provided by Saudi universities and international universities). The new study plan was revised by two scientific experts, both are professors. One from Local university and the other one from regional university (Egypt). Their comments, suggestions and recommendations were all taken into consideration before the final approval of the new study plan by UQU council.

<ol> <li>Other Evaluation (e.g. Evaluations by employers or other stakeholders, external review)</li> <li>Describe evaluation process. N / A</li> <li>Attach review/survey report.</li> </ol>							
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?)					a. List most important recommendations for improvement, strengths and suggestions for improvement.		
b. Changes pro	posed ir	the prog	ram (if any)	in response to this feedback.			
2. Ratings on S	ub-Stand	lards of S	tandard 4 by	program faculty and teaching staff; 4.1 to 4.10.			
(a) Standard 4 S rating for each s	ub-Stan ub-stanc	dards. Are lard. Indic	e the "Best F ate action p	Practices" followed; Yes or No? Provide a revised roposed to improve performance (if any).			
Standard 4 Sub-Standards	Best Practices Followed (Y/N)	5 Star Rating	List priorities for improvement.				
(4.1)- Student Learning Outcome	YES	****	<ul> <li>(1)- Relationship with the industry need to be further strengthened.</li> <li>(2)- There should be more interactions with employers to determine their requirements for qualified future work force.</li> <li>(3)- The "Interpersonal skills" for students must be further improved.</li> <li>(4)- some courses still use traditional assessment tools which in need to be upgraded.</li> <li>(5)- Constructing a committee of academic experts from inside and outside the university to express an opinion about identifying learning outcomes targeted.</li> </ul>				





(4.2)- Program development process	YES	****	<ol> <li>(1)- The program (study plan and course contents) required constant monitoring to observe weaknesses and improve them.</li> <li>(2)- Stakeholders should take part in developing process.</li> <li>(3)- Necessity of more meetings of the Advisory Board to discuss ways of evaluating and developing the program.</li> <li>(4)- Designing and implementation of training courses in the description of courses and programs for newly bound faculty members.</li> </ol>
(4.3)- Program review and evaluation process	YES	****	<ul> <li>(1)- The program (study plan; program specification and courses specifications) is being reviewed and evaluated by two external experts, one local and the other international.</li> <li>(2)- The program should be under constant monitoring for improvement and quality perspectives.</li> </ul>
(4.4)- Student assessment	YES	****	<ul> <li>(1)- Students' achievements have to be constantly monitored against the mission and objectives of the program.</li> <li>(2)- Dissemination and training of both the faculty members and students about the new assessment policy and procedure.</li> <li>(3)- the need for establishment of a central exam unit services to help faculty members and students.</li> <li>(4)- Developing effective measures to check the student's performance of their duties personally.</li> </ul>
(4.5)- Educational assistance for students	YES	***	<ul> <li>(1)- Departmental website on UQU portal must be improved to include all necessary information on educational rules, regulations in a concise and clear manner.</li> <li>(2)- Overseas students required more flexible and easy process to apply for admission and automated process to follow up their applications.</li> <li>(3)- Activating the academic guidance and means of electronic communication between students and the academic advisor.</li> <li>(4)- Language training for students prior to acceptance into the program.</li> </ul>





(4.6)- Quality of Teaching	YES	***	<ol> <li>(1)- Motivation of faculty members to attend workshops on learning outcomes and different teaching strategies.</li> <li>(2)- Teaching improvement need to be compared against KPIs.</li> <li>(3)- The Department of Biology may periodically invite visiting scholars from regional and international universities to assess the quality of the program.</li> <li>(4)- Applying effective systems for evaluating courses and teaching process and reviewing the effectiveness of various teaching strategies used.</li> </ol>
(4.7)- Support for improvement in quality of teaching	YES	****	<ul> <li>(1)- The KPIs outlined in the NCAAA Standards need to be constantly monitored with target benchmark.</li> <li>(2)- The Department requires more finance to purchase new laboratory equipment and service maintenance existing one to improve the quality of laboratory sessions.</li> <li>(3)- Development of creativity and excellence unit in the Biology Department to ensure the presentation of awards and official recognition for outstanding faculty members.</li> </ul>
(4.8)- Qualification and experience of teaching staff	YES	****	<ul> <li>(1)- All the teaching staff have obtained their PhD from well-known international universities in England, Germany, Japan, Canada and USA.</li> <li>(2)- The teaching staff are well experienced in teaching, some of which have more than 20 years teaching experience.</li> <li>(3)- assessing the qualifications and experience of faculty members staff. Pointing to the evidence, and submitted a report containing a summary of the strengths and areas requiring development and implementation priorities.</li> <li>(3)- The post-graduate programs are considered recently for different biological disciplines.</li> </ul>
(4.9)- Field experience activities	YES	****	<ul> <li>(1)- Healthcare sector employer required more improvement to secure better internship.</li> <li>(2)- Moreover, increasing the field trips and samples collection for students under supervision the faculty members staff.</li> <li>(3)- Preparation of the field experience report and describing the procedures for the planning of the activities of field experience (training), and planning for development.</li> </ul>





(4.10)- Partnership			(1)- Students exchange programs should be implemented and encouraged
arrangements with other	s NO 0	(2)- Exchange programs for visiting teaching staff members and researchers must be implemented and encouraged	
institutions			and researchers must be implemented and encouraged.

Analysis of Sub-standards. List the strengths and recommendations for improvement of the program's self-evaluation of following best practices.

# (4.1)- Student Learning Outcome

Strengths:

(1)- Intended learning outcomes are consistent with national qualification framework and requirements for professional practice in KSA.

(2)- Relevant academic and professional advices were considered during planning the intended learning outcomes.

(3)-The students learning outcomes are designed and intended to satisfy stakeholders' requirements.

(4)- learning outcomes of each course are mapped with the program objectives and are assessed each semester.

# **Recommendation:**

(1)- Students learning outcomes needed to be assessed by stakeholders throughout the academic year.

(2)- There should be more interactions with stakeholders to determine their latest requirements.

(3)- Feedback from alumni needed to be taken on yearly basis for program improvement.

(4.2)- Program development process

Strengths:

(1)- The new updated study plan and curricula are developed with collaboration of graduating students' feedbacks; alumni and teaching staff members.

(2)- The new updated curriculum was bench marked nationally and internationally.
(3)- The new updated study plan and curricula was revised prior to approval by two specialized professors from local and international institutions.

(4)- Plans for courses including intended learning outcomes for various learning domains and strategies of teaching and assessment are set out in course blue printing document as well as in course specifications.

# **Recommendation:**

(1)- Stakeholders should involve in updating the study plan and the curricula.





(2)- Plans for the delivery and evaluation of programs need to be set out in program specification.

(3)- Course report needed to be presented in scheduled seminars.

(4)- Students feedbacks for each course should be discussed in the department for the improvement of the next course delivery.

(4.3)- Program review and evaluation process

Strengths:

(1)- Teaching staff members are well experienced to review and evaluate the program content.

(2)- The study plan and curricula are revised by professional external experts.

# **Recommendation:**

(1)- Courses' objectives and program objective achievements are needed to be assessed semester wise as well as annually.

(2)- relevant record, like students results, completion rate needed to be maintained centrally as well as in the department.

(3)- reports on programs are reviewed annually by senior administrators and quality committees.

(4.4)- Student assessment

Strengths:

(1)- Teaching staff members use various assessment methods to determine the level of students learning outcomes.

(2)- Each course coordinator prepares course blueprint documents matching ILO's with teaching pedagogy and assessment strategies.

(3)- Students are provided with detailed course plan with timing and forms of assessments.

(4)- All academic rules and regulations are conveyed to the students at the start of the semester.

(5)- assessments of students work are conducted fairly and objectively.

# **Recommendation:**

(1)- External benchmark for students achievements should be developed.

# (4.5)- Educational assistance for students

Strengths:

(1)- Umm Al-Qura University (UQU) has a well-defined and well informative orientation program for new students, where all academic faculties and departments participate to provide information about the various programs provided by every department.

(2)- Online registration process is available and easy to use and follow by students.





(3)- The department provides further assistance to students throughout the semester.

(4)- Office hours for students are specified and conveyed to students.

(5)- Academic advisory and student counseling system is in place.

# **Recommendations:**

 (1)- Departmental website on UQU portal must be improved to include all necessary information on educational rules, regulations in a concise and clear manner.
 (2)- Overseas students required more flexible and easy process to apply for admission and automated process to follow up their applications.

(4.6)- Quality of Teaching

Strengths:

(1)- The department is staffed with well qualified teaching staff members.

(2)- All necessary information regarding course and academic rules are provided before starting the course.

(3)- All the courses have course surveys where students provide feedback regarding quality of course delivery, in terms of teaching.

# **Recommendations:**

(1)- Teaching improvement need to be compared against KPIs.
 (2)- The Department of Biology may periodically invite visiting scholars from regional and international universities to assess the quality of the program.
 (3)- Encouragement the faculty staff members to attend workshops for improvements of their teaching skills.

(4.7)- Support for improvement in quality of teaching

Strengths:

(1)- The presence of committed and devoted Vice Deanship for quality assurance and academic development.

(2)- All teaching staff develop and maintain their course portfolio.

# **Recommendations:**

(1)- The KPIs outlined in the NCAAA Standards need to be constantly monitored with target benchmark.

(2)- The Department requires more finance to purchase new laboratory equipment and service maintenance existing one to improve the quality of laboratory sessions.





(4.8)- Qualification and experience of teaching staff Strengths:

(1)- The Department of Biology have diverse, multinational, well qualified teaching staff members with vast teaching and research experience, who obtained their PhD from reputable institutions in Europe and USA.

(2)- All faculty members staff are actively involved in teaching, research and professional development in areas of teaching, learning and assessment.

(4.9)- Field experience activities

Strengths:

(1)- The biology program has a very well-arranged field experience activities that have been running for the past 25 years.

(2)-The field experience activities involve training in clinical laboratories (hospitals laboratories); and water quality laboratories (water companies and bottled water factories). A number of the program graduates through the years have been working in these laboratories and reached higher positions in their jobs.

(3)- Other graduated students finished their master degrees and are studying Ph. D. in several fields abroad.

(4)- Female graduates trained in schools as for being biology teachers.

# **Recommendations:**

(1)- Require improvement with field trip facilities and equipment to secure better practicum.

# (4.10)- Partnership arrangements with other institutions

Weakness:

(1)- No Students and/or teaching staff members exchange programs are exits now for the BSc Biology program.

# **Recommendations:**

(1)- Students exchange programs should be implemented and encouraged.

(2)- Exchange programs for visiting teaching staff members and researchers must be implemented and encouraged.





# **G. Program Course Evaluation**

1. List all program 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.

	Stu	ıdent		Action	
Course Title/Course Code	Evalu	uations	Other Evaluation	Pla	nned
	Yes	No	(specify)	Yes	No
4011101 GENERAL BIOLOGY	✓				
4012161 BIOSTATISTICS		✓			
4012141 GENERAL ANATOMY					
4012211 PLANT KINGDOM		✓			
6012311 INVERTEBRATES		✓			
4012232 PLANT TAXONOMY		✓			
4012242 PLANT ECOLOGY		✓			
4012322 VERTEBRATES		✓			
4012252 PHYCOLOGY		✓			
4012172BIOCHEMISTRY	<ul> <li>✓</li> </ul>				
4013331 ANIMAL PHYSIOLOGY I		✓			
4013261 PLANT PHYSIOLOGY I		✓			
4013281 GENETICS		✓			
4013291 FLORA OF SAUDI ARABIA		✓			
4013352 ANIMAL ECOLOGY		✓			
4013362ENTOMOLOGY		✓			
4013342 ANIMAL PHYSIOLOGY II		✓			
4013272 PLANT PHYSIOLOGY II		✓			
4013402 VIROLOGY AND BACTERIOLOGY		✓			
4013182MOLECULAR BIOLOGY	✓				
4014311PARASITOLOGY		✓			
4014321 FAUNA OF SAUDI ARABIA		✓			
4014331 PEST CONTROL		✓			
4014411 MYCOLOGY AND PLANT		✓			
PATHOLOGY					
4014191 ENVIRONMENTAL POLLUTION	✓				
4014111BIOTECHNOLOGY	✓				
4014342 ANIMAL BEHAVIOR		✓			
4014352EMBRYOLOGY		✓			
4014212 TISSUE CULTURE		✓			
4014362 ENDOCRINOLOGY		✓			
4014923FINAL YEAR PROJECT		✓			

(Add items or attach list if necessary)





List courses taught by this program this year and for this program that are in other programs.

Year	Course Code	Course Title	Credit Hours	Faculty/ Department or University	
Prep 1 <sup>st</sup> Year Semester 1					
	4021101	General Chemistry	4	Preparatory year	
_	601101	Islamic Culture 1	2	<b>Preparatory year</b>	
	7001401	English Language	4	<b>Preparatory year</b>	
_	4041101	Mathematics (Calculus)	4	Preparatory year	
	605101	Holy Quran 1	2	<b>Preparatory year</b>	
Prep 1 <sup>st</sup> Year Semester 2					
	4011101	General Biology	4	Preparatory year	
	7001401	English for Applied Sciences	4	<b>Preparatory year</b>	
	4031101	General Physics	4	Preparatory year	
	501101	Arabic Language	2	Preparatory year	
	102101	Biography of The Prophet Mohammad	2	Preparatory year	
2 <sup>nd</sup> Year Semester 1					
	4022061	Biostatistics	2	<b>Mathematics Department</b>	
	4012211	Plant Kingdom	3	<b>Biology Department</b>	
	4022301	Organic Chemistry	4	<b>Chemistry Department</b>	
	4012041	General Anatomy	3	<b>Biology Department</b>	
	605201	Holy Quran II	2	University	
nd	4012311	Invertebrates	3	<b>Biology Department</b>	
2 <sup>nu</sup> Year Semester 2					
	4012232	Plant Taxonomy	3	<b>Biology Department</b>	
	4012242	Plant Ecology	3	<b>Biology Department</b>	
	4012322	Vertebrates	3	<b>Biology Department</b>	
	4012252	Phycology	3	<b>Biology Department</b>	
	4012072	Biochemistry	3	<b>Chemistry Department</b>	
	601201	Islamic Culture II	2	University	





3 <sup>rd</sup> Year				
Semester 1				
	4013331	Animal Physiology I	3	<b>Biology Department</b>
	4013261	Plant Physiology I	3	<b>Biology Department</b>
	4013281	Genetics	3	<b>Biology Department</b>
	4013291	Flora of Saudi Arabia	3	<b>Biology Department</b>
	601301	Islamic Culture III	3	University
	605301	Holy Quran III	2	University
3rd Year Semester 2				
	4013352	Animal Ecology	3	<b>Biology Department</b>
	4013362	Entomology	3	<b>Biology Department</b>
	4013342	Animal Physiology II	3	<b>Biology Department</b>
	4013272	Plant Physiology II	3	<b>Biology Department</b>
	4013402	Virology and Bacteriology	3	<b>Biology Department</b>
	4013082	Molecular Biology	3	<b>Biology Department</b>
4 <sup>th</sup> Year Semester 1				
	4014311	Parasitology	3	<b>Biology Department</b>
	4014321	Fauna of Saudi Arabia	3	<b>Biology Department</b>
	4014331	Pest Control	3	<b>Biology Department</b>
	4014411	Mycology and Plant Pathology	2	<b>Biology Department</b>
	4014091	<b>Environmental Pollution</b>	2	<b>Biology Department</b>
	605401	Holy Quran IV	2	University
4 <sup>th</sup> Year Semester 2				
	4014342	Animal Behavior	2	<b>Biology Department</b>
	4014352	Embryology	3	<b>Biology Department</b>
	4014212	Tissue Culture	3	<b>Biology Department</b>
	4014112	Biotechnology	3	<b>Biology Department</b>
	4014362	Endocrinology	3	<b>Biology Department</b>
	601401	Islamic Culture IV	2	University





3. Program Learning Outcomes Assessment. Provide a report on the program learning outcomes assessment plan using the NCAAA accreditation four year cycle. By the end of the four year cycle all program learning outcomes must 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.

KPI	NQF Learning Domains	Method of	Date	
#	and Learning Outcomes	Assessment for ILOs	of Assessment	
1.0	Knowledge			
1.1	To know the ethics of biology and related areas of science	(1)- quizzes, mid-term and final exams.	(1)- week 6, 10 and 17	
1.2	To design methods for analyzing and solving problems in the field of biology and its applications	<ul><li>(2)- Assessment of lab reports and practical examinations.</li><li>(3)- Evaluating individual and</li></ul>	(2)- week 6 and 16 (3)- throughout the	
1.3	To think critically in evaluating biological information	group tasks, and evaluating presentations and talks.	week 16	
1.4	To implement projects related to his study in biology program.	(4)- Activities and homework evaluations.	(4)- throughout the semester before week 16	
2.0	Cognitive Skills			
2.1	To understand the importance of scientific research and look at the recent advances in biological sciences	<ul><li>(1)- Assessment of scientific experiments</li><li>(2)- Evaluating individual and</li></ul>	<ul><li>(1)- throughout the semester</li><li>(2)- throughout the</li></ul>	
2.2	To prepare, explore, identify, analyze and evaluate various scientific problems and solutions.	group tasks (3)- Witten exams	semester (3)- week 6, 10, and	
2.3	To compare and contrast the methods of scientific research and the ability to design and evaluation of scientific research	(4)- Evaluation of Activities and homework.	<ul><li>(b) week 6, 16, and</li><li>17</li><li>(4)- throughout the semester</li></ul>	
3.0	Interpersonal Skills & Responsibility			
3.1	To involve working independently and with multi- disciplinary teams.	<ul><li>(1)- Assessment of group projects.</li><li>(2)- Assessment of projects conducted individually.</li></ul>	(1)- prior to week 16 (2)- prior to week	
3.2	To cooperate in providing scientific and technical services in various fields for all sectors		16	
4.0	Communication, Information Technology,	Numerical		
4.1	To use the computer to prepare written reports, evaluate scientific data and calculations	(1)- Evaluating the laboratory written reports.	(1)- week 15 or 16 (2)- throughout the	
4.2	To use the internet to conduct search for published articles and books	(2)- Evaluating activities and homework.	semester	
5.0	Psychomotor			
5.1	To perform basic and advanced biological laboratory techniques	(1)- Evaluation of laboratory written reports (2)- Practical ayons	(1)- week 15 or 16 (2)- week 10 and 16	
5.2	to be able to operate laboratory instruments			





Provide an analysis of the Four (five/six) Year Program Learning Outcome Assessment Cycle (List strengths and recommendations).

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.

Provide "direct assessments" for the current year's program learning outcomes, according to the dates provided above (G.2). A KPI Assessment Table is provided below. Each learning outcome should utilize a separate KPI table. Over the four (five/six) year cycle, all program learning

Provide "direct assessments" for the current year's program learning outcomes, according to the dates provided above (G.2). A key performance indicator (KPI) table is provided below. Each learning outcome should utilize a separate KPI table. Over the four (five/six) year cycle, all program learning outcomes are to be assessed and reported in the Annual Program Report(s).

# Note: Programs are to provide their own KPIs for directly measuring student performance.

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 Code # Progr	am KPI:
Assessment Year	Program Learning Outcome:
NQF Learning Domain	
KPI Target Benchmark	
KPI Actual Benchmark	
Internal Benchmark	
External Benchmark	
Analysis: (List strengths and 1. The vision, mission of the faculty an	l recommendations) ion, and values are clear, appropriate, capture the main function d are aligned with the university mission.

# **KPI** Assessment Table (Institutionally approved for the program)

2. The program's message was used to determine the objectives of the program

- properly and clearly as it was influential in the development of the strategic plan.
- 3. This views of relevant internal (staff members and students) and external





	stakeholders have an active role in the formulation of the message and goals in its current text.				
4.	Support and regular follow-up of the implementation of the strategic plan.				
5.	The need to revise the goals and objectives on a regular basis and adjustment in relation to the changing circumstances.				
6.	6. General requirements of academic staff in terms of education, research, and healthcare are defined greatly impacts on learning process.				
7. Students and academic staff members are encouraged in promoting the program's vision and mission.					
New Targe	t Benchmark				

3. Orientation programs for new teaching	ng sta	ff	
Orientation programs provided? Yes	✓	No	If offered how many participated? 20

a. Brief Description

- 1. The objective of this induction program is to welcome the new teaching staff members in our university and prepare them for their actual academic role.
- 2. Orientation program for preparing the new faculty members (teaching staff members), which is organized by the Deanship of Development and Quality in cooperation with a number of deanships (i.e. Deanship of Libraries; Deanship of Postgraduate studies; Deanship of Information Technology), centers and academic departments of the Umm Al-Qura University.
- 3. The program runs for five consecutive days aiming to prepare new faculty members at the university by providing them with the knowledge they need to perform their professional duties and knowledge of the university regulations, academic regulations, methods of teaching and evaluations and all the services provided to them.

# **Targeted audience:**

Newly recruited faculty members (teaching staff members), both non-Saudi contractors from universities outside the Kingdom, as well as Saudis who completed their scholarships for master degree and PhD degree and returned back to work at the university, as well as newly appointed teaching assistants.

# Detailed objectives of the program:

(1) Facilitate the integration of newly appointed teaching staff members into the university as soon as possible.

(2) - Introducing newly appointed teaching staff members to the history, mission and goals of the university.

(3) - Introducing newly appointed teaching staff members to university regulations, rules and official procedures.





(4) - Introducing newly appointed teaching staff members to the Library and other sources of information available.

(5)- Introducing newly appointed teaching staff members to research resources and services available.

(6)- Bring to the awareness of the newly appointed teaching staff members the places of services within the campus area; such as medical clinics and gymnasiums and other non-academic facilities.

(7) - Increase the efficiency and effectiveness of professional production among newly appointed teaching staff members.

(8)- Developing the teaching, assessment and research skills of newly appointed faculty members (teaching staff members).

b. List recommendations for improvement by teaching staff.

The orientation program has been receiving praises from participating new teaching staff, their academic departments and participating supporting deanships. Most of the strengths of the orientation program is that it helps new teaching staff to get familiar with the university academic and administrational rules as well as the regulations. Also, it helps new teaching staff to identify all the facilities available and various supporting deanships and their services and regulations.

c. If orientation programs were not provided, give reasons.  $\mathbf{N}\,/\,\mathbf{A}$ 

4. Professional Development Activities for Faculty, Teaching and Other Staff	How Partic	many cipated
a. Activities Provided	Teaching Staff	Other Staff
Teaching strategies at university level (5 hours workshop)	15	
Active learning (5 hours workshop)	10	
Students assessments methods (5 hours workshop)		
b. Summary analysis on usefulness of activities based on participant's evaluate evaluation methods.	tions or othe	er
Data not available		





# H. Independent Opinion on Quality of the Program (e.g. head of another similar department / program offering comment on evidence received and conclusions reached).

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



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# Program KPI and Assessment Table

KPI #	КРІ	KPI Target Benchmark	KPI Actual Benchmark	KPI Internal Benchmarks BSc Biology (Al-Jouf University, Skaka, KSA)	KPI External Benchmarks BSc Biology (Waterloo university, Ontario, Canada)	KPI Analysis	KPI New Target Benchmark
1	Students overall evaluation on the quality of their learning experience	5.0 (100 %)	4.0 (80 %) Program evaluation survey	No data available	79 % satisfied (170 survey, only 73 responded) <u>www.unistats</u> .direct.gov.uk	See below the table	5.0
2	Proportion of courses in which students' evaluations were conducted during the year	4.0 (80 %)	1.0 (20 %) Course evaluation survey	No data available	No data available	See below the table	4.0
3	Students overall rating on the quality of their courses	5.0 (100 %)	3.5 (75 %) Course evaluation survey	No data available	79 % satisfied (170 survey, only 73 responded) <u>www.unistats</u>	See below the table	5.0



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					.direct.gov.uk		
4	Proportion of teaching staff with verified doctoral qualifications	5.0 (100%)	5.0 (100%)	No data available	5.0 (100%)	See below the table	5.0 (100%)
5	Percentage of students entering the program who successfully completed the first year	4.5 (85 %)	3.9 (78 %) Department al 5 years cohort analysis	No data available	No data available	See below the table	4.5 (85 %)
6	Number of referred publications in the previous year per full time equivalent teaching staff	4.0 (80%)	3.5 (70%) Annual Department al research outcome analysis	No data available		See below the table	4.0 (80%)
1Whole Program Analysis of KPIs and Benchmarks: (list strengths and recommendations)							

(1)- Students overall evaluation on the quality of their learning experience:

(2)- Proportion of courses in which students' evaluations were conducted during the year:

(3)- Students overall rating on the quality of their courses:

(4)- Proportion of teaching staff with verified doctoral qualifications:

(5)- Percentage of students entering the program who successfully completed the first year:



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(6)- Number of referred publications in the previous year per full time equivalent teaching staff:

In 2016 the teaching staff members in the BSc biology program at the department of Biology were able to publish a total of (15) research articles in reputable international journals, most of which are well indexed (ISI, Scopus, PubMed), some of which with good impact factor (ISI Impact Factor). In addition to a number of manuscripts submitted in November and December 2016, and if accepted, should be published in 2017. These research articles were varied between collaboration between departmental microbiology group (5 research articles), and collaboration between departmental biology group and researchers from other departments within UQU as well as researchers from other institutions (e.g. King Saud University, Egypt; Ain Shams university). Given the vast research experience and enthusiasm of the biology teaching staff members we consider that the number of publications in 2016 (15 in total) is somewhat less than what we hope. This is possibly due to multi factors associated with the research projects and/or the involvement of teaching staff members with their teaching and other departmental duties. We aim to increase the number of research publications in 2017 keeping mind maintaining the quality of research and searching for more collaborations with researchers within UQU various departments and local universities in Saudi Arabia and beyond.

**NOTE** The following definitions are provided to guide the completion of the above table for Program KPI and Assessment.

**<u>KPI</u>** refers to the key performance indicators the program used in its SSRP. This includes both the NCAAA suggested KPIs chosen and all additional KPIs determined by the program (including 50% of the NCAAA suggested KPIs and all others).

Target Benchmark refers to the anticipated or desired outcome (goal or aim) for each KPI.

**Finding Benchmark** refers to the actual outcome determined when the KPI is measured or calculated.

**Internal Benchmarks** refer to comparable benchmarks (actual findings) from inside the program (like data results from previous years or data results from other departments within the same college).

**External Benchmarks** refer to comparable benchmarks (actual findings) from similar programs that are outside the program (like from similar programs that are national or international).

KPI Analysis refers to a comparison and contrast of the benchmarks to determine strengths and recommendations for improvement.



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**New Target Benchmark** refers to the establishment of a new anticipated or desired outcome for the KPI that is based on the KPI analysis.

# **Program Action Plan Table**

Directions: Based on the "Analysis of KPIs and Benchmarks" provided in the above Program KPI and Assessment Table, list the recommendations identified and proceed to establish a continuous improvement action plan.

No.	Recommendations	Actions	Assessment Criteria	Responsible Person	Start Date	Completion Date
1						
2						
3						
4						
5						
6						
Actio	on Plan Analysis (List the s	strengths and recommendations for	or improvement of the Program	Action Plan).		



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# I. Action Plan Progress Report

1. Progress on Implementation of Previous Ye	ear's Action Plan	S		
Actions Planned	Planned Completion Date	Person Responsible	Completed	If Not Complete, Give Reasons
a. Smart Boards in classroom teaching	Done	Dean	Completed	
Actions Planned	Planned Completion Date	Person Responsible	Completed	If Not Complete, Give Reasons
b. preparation of laboratories equipped with new specialized instruments	Within the year	Head of the Department	In Progress	
Actions Planned	Planned Completion Date	Person Responsible	Completed	If Not Complete, Give Reasons
c. A new curriculum has been designed that take into account the advancing occurring in the updating courses in biological field.	Done	Department curriculum committee in conjunction with the head of the department	completed	



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Actions Planned	Planned Completion Date	Person Responsible	Completed	If Not Complete, Give Reasons
d.				



Program Chair/ Coordinator Name:	
Signature:	Date Report Completed:
Received by:	Dean/Department Head
Signature:	Date: