

# **STRATEGIC PLAN**

# **DEPARTMENT OF BIOLOGICAL SCIENCES**

KING ABDULAZIZ UNIVERSITY

2018-2022 / 1440-1444

(HAIAWI)



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#### HEAD OF THE DEPARTMENT OF BIOLOGICAL SCIENCES PROF. DR. KHALED AL-GHAMDI

We thank Allah for his grace and his holiness, and peace be upon our prophet Mohammed . The academic performance in universities needs continuous development to fulfill the required standards for academic education. For that we need to verify the priorities for the educational programs to determine the variety goals and to work on using the tools and techniques to present vital information clear and fast, to fit with all the requirements of the suit educational generation and the desire of the modern university generation who wish to use these means. From this point, Department of Biological Sciences (DBS) faculty members have been nominated with all its different programs with the department head to accomplish seminars and workshops that had been organized by the strategic center to achieve Saudi Arabia 2030 Vision to achieve the perspectives of our wise leadership of Custodian of the Two Holy Mosques and respected Crown Prince May Allah bless and protect them. We in the Biological Sciences department, created a five years strategic plan (2018-2022) which is highly related to the Faculty and university goals and vision to become more synced with the modern generation and labor market and to be more compatible to attract more individual educational environment that requires the Biology programs that will be planned to achieve the accurate high levels of outputs. The student would trust and attach to his / her specialty; because this is our great message in DBS for our students at KAU. This is what our executive management was trying to accomplish with the right leadership of Dr. Abdulrahman Bin Obaid Al-Youbi . We hope the best of luck to our University and students for what can achieve the best of goals to our home country.

#### THE WORD OF DEPARTMENT OF BIOLOGY SUPERVISOR DR. MONA GHONEIM AL-HARBI

Praise be to God, Lord of the worlds, and prayers and peace be upon our Prophet Muhammad and upon his family and companions...

Strategic planning is a systematic process to identify the priorities and programs that would help the colleges and departments to achieve their vision, mission, and implement their goals. Therefore, the Department of Biology at the Science College worked on building its strategic plan for the next five years (2018-2022) aligned with the College of Science plan (2018-2020), and King Abdulaziz University (KAU) 3<sup>rd</sup> plan (strengthening 2016-2020), and in support of the strategic objectives of KAU, and the aspirations of the wise leadership and the vision of 2030, an operational for strategic plan implementation was prepared for the Department of Biology, and a team of faculty members from both parts of the two sections participated in preparing the plan through multiple workshops to conduct an analysis for comprehensive methodology in terms of elements of strength and weakness, identifying opportunities and threats, and including them within the strategic plan to achieve the vision and mission of the department and to ensure the quality of the department's outputs with its three programs (microbiologist - Botany -Zoological sciences) to prepare a highly qualified graduates and a strong competitor in the labor market and enhance the effective role of the department members of the faculty, administrators, and technicians in the scientific and societal fields and to contribute greatly and effectively to achieving the mission of the Department of Biology. The College of Science and the University, started to work on implementing the first operational steps of the strategic plan (first-rate), and we are continuing by God willing to achieve the goals of this plan, so we ask God for success.

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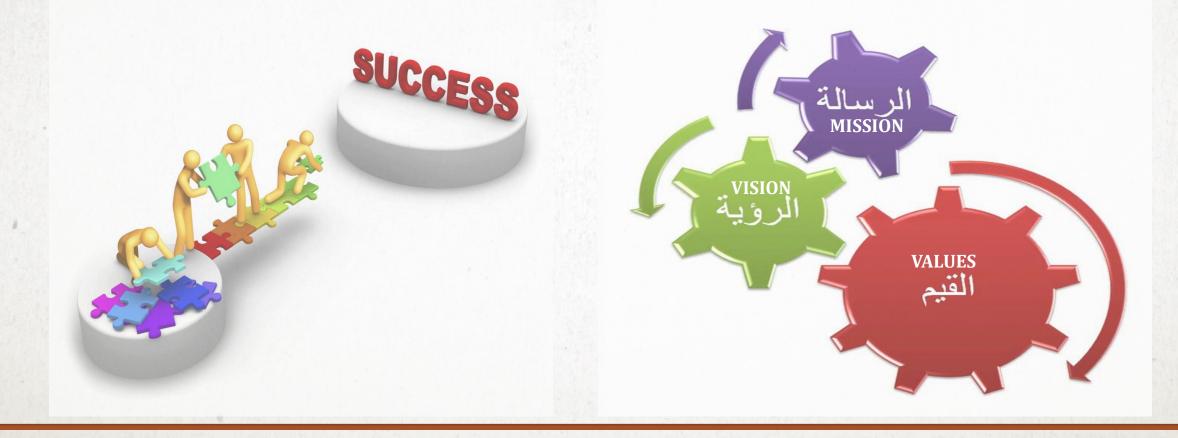
### **APPROVAL OF THE STRATEGIC PLAN OF THE DEPARTMENT OF BIOLOGY**

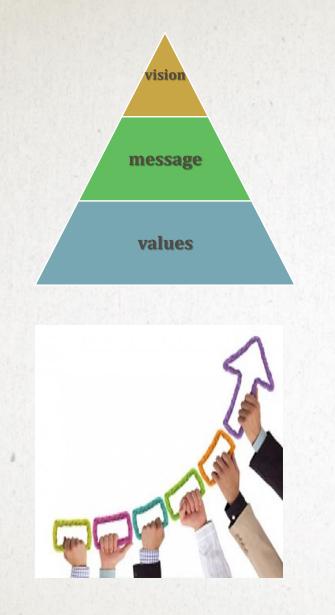
With the grace of God, the strategic plan of the Department of Biology was approved as the following:

- The vision and mission of the program were approved for the three biology department programs (Zoology, Botany, Microbiology) in the joint department council for the academic year 1440/1441H on Tuesday dated 3/6/1441H,1/28/2020 AD.
- The strategic plan guide for the Department of Biology was approved in the Joint Department Council for the academic year 1441 AH on Wednesday 15/5/1442H, 1/30/2021 AD.

# **CHAPTER I**

# VISION, MISSION AND GOALS OF THE DEPARTMENT OF BIOLOGICAL SCIENCES





### Vision

Excellence in teaching biological sciences, leadership in scientific research, community service and deepening the culture of innovation and creativity

### **Mission**

Preparing and providing advanced educational programs and accredited locally and internationally and preparing distinguished graduate culturally, scientifically and research capable of competing in the job market

### Values

Cooperation - leadership - sustainability - creativity - innovation - scientific integrity

### Goals

- 1- Developing creativity and distinction among faculty members and students
- 2- Developing undergraduate programs in accordance with the standards of the academic accreditation locally, internationally, and the Vision of 2030
- 3- Enhancing the quality of on-campus, online, and distance learning
- 4- Developing graduate studies programs and research outputs
- 5- empowering extracurricular activities and volunteer work
- 6- Establishing self-financing programs and initiatives

#### ALIGNMENT OF THE STRATEGIC PLAN OF ZOOLOGY PROGRAM WITH DEPARTMENT OF BIOLOGICAL SCIENCES/FACULTY OF SCIENCE/ AND KAU STRATEGIC PLANS

Axis of Alignment Zoology Program		Department of Biological Sciences Faculty of Science		King Abdulaziz University
Vision	Compete domestically and internationally in the quality of zoology program's outcomes and alignment to the job market	Excellence in teaching biological sciences, leadership in scientific research, community service and deepening the culture of innovation and creativity	Global competition in basic and applied scientific research	Globally distinguished university with sustainability and society partnership
Mission	Preparing a distinguished graduate with scientific background in animal sciences, and personal and community skills.	Preparing and providing advanced educational programs and accredited locally and internationally and preparing distinguished graduate culturally, scientifically and research capable of competing in the job market	Preparing distinguished graduate and pioneering research environment for serving the community	Our social responsibility: Developing knowledge, entrepreneurship research and innovation.
Values	Creativity - sustainability - leadership - sincerity	Cooperation -leadership - sustainability -creativity - innovation -scientific integrity	Integrity-Creativity- Sustainability	Taqwa, Perfection, cooperation, citizenship, excellence, innovation, sustainability

ALIGNMENT OF THE STRATEGIC PLAN OF MICROBIOLOGY PROGRAM WITH DEPARTMENT OF BIOLOGICAL SCIENCES/FACULTY OF SCIENCE/ AND KAU STRATEGIC PLANS

Axis of Alignment	Microbiology Program	Microbiology Program Department of Biological Sciences Faculty of Science		King Abdulaziz University
Vision	Compete domestically and internationally in the quality of Microbiology program's outcomes and alignment to the job market	Excellence in teaching biological sciences, leadership in scientific research, community service and deepening the culture of innovation and creativity	Global competition in basic and applied scientific research	Globally distinguished university with sustainability and society partnership
Mission	Preparing a distinguished graduate with scientific background in microbial sciences, and personal and community skills.	Preparing and providing advanced educational programs and accredited locally and internationally and preparing distinguished graduate culturally, scientifically and research capable of competing in the job market	Preparing distinguished graduate and pioneering research environment for serving the community	Our social responsibility: Developing knowledge, entrepreneurship research and innovation.
Values	Creativity - sustainability - leadership - sincerity	Cooperation -leadership - sustainability -creativity - innovation -scientific integrity	Integrity-Creativity- Sustainability	Taqwa, Perfection, cooperation, citizenship, excellence, innovation, sustainability

#### ALIGNMENT OF THE STRATEGIC PLAN OF BOTANY PROGRAM WITH DEPARTMENT OF BIOLOGICAL SCIENCES/FACULTY OF SCIENCE/ AND KAU STRATEGIC PLANS

Axis of Alignment	Botany Program	Department of Biological Sciences	Faculty of Science	King Abdulaziz University
Vision	Compete domestically and internationally in the quality of Botany program's outcomes and alignment to the job market	Excellence in teaching biological sciences, leadership in scientific research, community service and deepening the culture of innovation and creativity	Global competition in basic and applied scientific research	Globally distinguished university with sustainability and society partnership
Mission	Preparing a distinguished graduate with scientific background in plant sciences, and personal and community skills.	Preparing and providing advanced educational programs and accredited locally and internationally and preparing distinguished graduate culturally, scientifically and research capable of competing in the job market	Preparing distinguished graduate and pioneering research environment for serving the community	Our social responsibility: Developing knowledge, entrepreneurship research and innovation.
Values	Creativity - sustainability - leadership - sincerity	Cooperation -leadership - sustainability -creativity - innovation -scientific integrity	Integrity-Creativity- Sustainability	Taqwa, Perfection, cooperation, citizenship, excellence, innovation, sustainability

### ALIGNMENT OF THE GOALS OF THE STRATEGIC PLAN OF FACULTY OF SCIENCE WITH KING ABDULAZIZ UNIVERSITY

	The goals of the strategic plan of King Abdulaziz University	Promote teaching, learning and educational services to raise the efficiency of educational outcomes and develop a stimulating and supportive environment for creativity and innovation	Increasing graduate programs and enhancing and investing in the quality of scientific research	Improving social participation of employees and making distinctive contributions to community services	Promote the development of skills and capabilities for administrative leaderships and academic qualities in accordance with scientific and methodological frameworks with contemporary and innovative thinking to resolve problems, media developments and communication to enhance mental ability.	Increase resource efficiency, implement rationalizatio n principles, and reduce wastage and save money.	Improve the infrastructure and services and their sustainability according to the standards of green universities and develop information technology services and applications.	Increasing investment in university's achievemen ts to diversify funding and partnership s programs.
	The goals of the strategic plan of Faculty of Science	1	2	3	4	5	6	7
1	Enhancing the quality of the learning process outcomes	$\checkmark$						
2	Increasing research productivity							
3	Positive participation in community development			$\checkmark$				
4	Developing administrative organization and increasing productivity				$\checkmark$			
5	Achieving financial sustainability							

### ALIGNMENT OF THE GOALS OF THE STRATEGIC PLAN OF DEPARTMENT OF BIOLOGICAL SCIENCES WITH FACULTY OF SCIENCE

	The goals of the strategic plan of Faculty of Science	Enhancing the quality of the learning process outcomes	Increasing research productivity	Positive participation in community development	Developing administrative organization and increasing productivity	Achieving financial sustainability
	The goals of the strategic plan of Department of Biological Sciences	1	2	3	4	5
1	Developing creativity and distinction among faculty members and students	$\checkmark$				
2	Developing undergraduate programs in accordance with the standards of academic accreditation locally and internationally and the 2030 vision	$\checkmark$				
3	Enhancing the quality of on campus, online, and distance learning	$\checkmark$				
4	Developing graduate studies programs and research outputs		$\checkmark$			
5	Empowering extracurricular activities and volunteer work					
6	Establishing self-financing programs and initiatives					

### ALIGNMENT OF THE GOALS OF THE STRATEGIC PLAN OF MICROBIOLOGY PROGRAM WITH DEPARTMENT OF BIOLOGICAL SCIENCES

	The goals of the strategic plan of Department of Biological Sciences	Developing creativity and distinction among faculty members and students	Developing undergraduate programs in accordance with the standards of academic accreditation locally and internationally and the 2030 vision	Enhancing the quality of on campus, online, and distance learning	Developing graduate studies programs and research outputs	Empowering extracurricula r activities and volunteer work	Establishing self-financing programs and initiatives
	The goals of the strategic plan of Microbiology program	1	2	3	4	5	
1	Prepare graduates with the skills required for future career opportunities in microbial sciences.	$\checkmark$	$\checkmark$				
2	Engage students in scientific investigations	$\checkmark$	$\checkmark$		$\checkmark$		
3	Encourage students to participate in activities that serve the community and the country		$\checkmark$			$\checkmark$	

### ALIGNMENT OF THE GOALS OF THE STRATEGIC PLAN OF ZOOLOGY PROGRAM WITH DEPARTMENT OF BIOLOGICAL SCIENCES

	The goals of the strategic plan of Department of Biological Sciences	Developing creativity and distinction among faculty members and students	Developing undergraduate programs in accordance with the standards of academic accreditation locally and internationally and the 2030 vision	Enhancing the quality of on campus, online, and distance learning	Developing graduate studies programs and research outputs	Empowering extracurricula r activities and volunteer work	Establishing self-financing programs and initiatives
	The goals of the strategic plan of Zoology program	1	2	3	4	5	
1	Prepare graduates with the skills required for future career opportunities in animal sciences.	$\checkmark$	$\checkmark$			$\checkmark$	
2	Engage students in scientific investigations	$\checkmark$	$\checkmark$		$\checkmark$		
3	Encourage students to participate in activities that serve the community and the country		$\checkmark$			$\checkmark$	

### ALIGNMENT OF THE GOALS OF THE STRATEGIC PLAN OF BOTANY PROGRAM WITH DEPARTMENT OF BIOLOGICAL SCIENCES

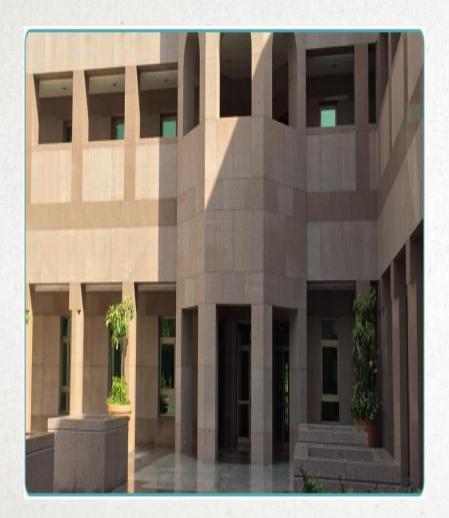
	The goals of the strategic plan of Department of Biological Sciences	Developing creativity and distinction among faculty members and students	Developing undergraduate programs in accordance with the standards of academic accreditation locally and internationally and the 2030 vision	Enhancing the quality of on campus, online, and distance learning	Developing graduate studies programs and research outputs	Empowering extracurricula r activities and volunteer work	Establishing self-financing programs and initiatives
	The goals of the strategic plan of Botany program	1	2	3	4	5	
1	Prepare graduates with the skills required for future career opportunities in plant sciences.	$\checkmark$	$\checkmark$			$\checkmark$	
2	Engage students in scientific investigations	$\checkmark$	$\checkmark$		$\checkmark$		
3	Encourage students to participate in activities that serve the community and the country		$\checkmark$			$\checkmark$	

# **CHAPTER II**

### DESCRIPTION AND DIAGNOSIS OF THE CURRENT SITUATION OF THE DEPARTMENT OF BIOLOGICAL SCIENCES



# **CHARACTERIZATION FOR THE CURRENT SITUATION**



- Scientific Department Name: Department of Biology
- Head College: College of Science.
- Location : Slaimaniyyah District Jeddah .
- Establishment Date: 1973 / 1393H
- Scientific programs :

Three Bachelor of Science Programs : (Microbiology, Zoology, Botany) Four programs of postgraduate programs : Master , PHD (Botany , Zoology , Microbiology, Genetics ).

• Study Duration :

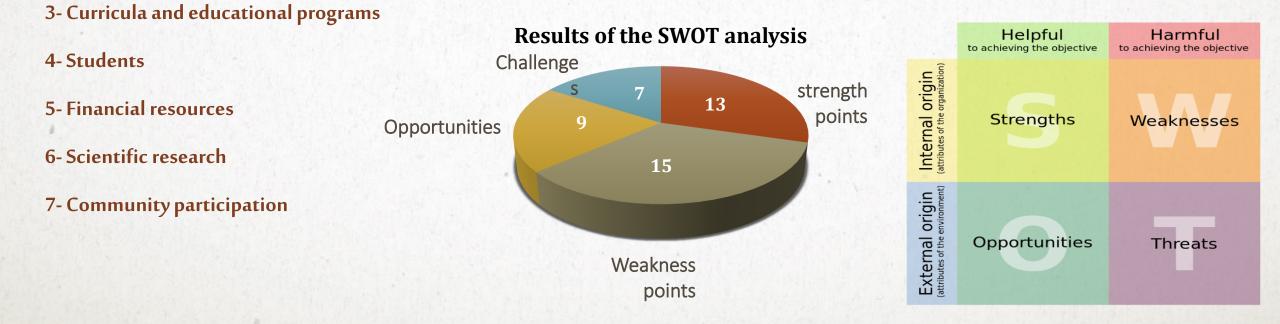
Bachelor: 4 Years Master: 2 Years PHD: 4 Years.

• Academic Leadership : Head of Department Head : Prof. Khaled Al-Ghamdi . Department Coordinator of female section : Dr . Mona Al-Harbi .

### SWOT ENVIRONMENTAL ANALYSIS

An internal and external environmental analysis of the department was done to identify strengths and weaknesses as well as opportunities and challenges to identify priorities and achieve the highest level of achievement. Important axes were identified that should be placed within the implementation plan projects:

- 1- Infrastructure and facilities of the department
- 2- Academic, administrative and technical staff



### Points of strength and weakness

	strength and weakness
Weakness points	Strength points
There are no independent maintenance contracts for the female students' campus specialized in laboratory equipment	The presence of faculty members graduated from renowned international universities with a variety of modern specialties, some of which are rare, such as bioinformatics, genetics, medical viruses and others.
The lack of a database of organizations and research support agencies	The distinguished scientific participations of many members in local and international forums and their acquisition of many awards and patents
Limited financial resources for the department	The strength of scientific research in the department, either through the formed research groups or through the scientific supervision of master's and doctoral theses
The absence of members of the department devoted to important work and committees, such as academic accreditation	The presence of great administrative experience with a large number of faculty members in the department, for they occupy many important positions inside and outside the university, such as the Shura Council, the United Nations, and others
Moderate professional qualification for female technicians	The desire of the department's leadership to obtain national and international accreditations and awards
The remoteness of the female campus building from the boys' campus , which delays and postpones many matters that need speed in implementation and performance	The presence of devices for advanced biotechnology
Limited cooperation with the industrial sector	A supportive learning environment
Lack of staff of lecturers, technicians and administrators in the female section	Existence of research competencies with the ability to work as a research team to deal with environmental problems
Acceptance of a large number of female students at low rates due to the absence of standards and rates for admission to the college and department	The department's programs serve the labor market and Vision 2030
The absence of programs dedicated to the technicians on the maintenance and operation of scientific devices	Diversity of disciplines and tracks in the biology department
Poor level of tests, multiple choice reliance, and the absence of a committee to monitor and review test questions	There are a number of laboratories with different and varied specialties
The poor level of English language among the students of the department	The large area of the building and the internal and external yards of the biology department
The small number and weakness of the research laboratories equipment in the department	Acceptance of large numbers of female students for the bachelor's and postgraduate levels
20 The lack of private places for female students to study and meet between lectures	

### Opportunities and challenges

Challenges	Opportunities
Increase the number of emerging and private universities and the transfer of faculty members to them, loan them as advisors, or work outside the university	The state's tendency to pay attention to major projects that allow the opening of a number of programs in the department to participate in these projects, such as the Saudi Genome Project and the Neom and Red Sea Project.
Expanding the opening of public and private universities in the region and the transfer of students to it	The university and college aiming to obtain academic accreditation for all programs
Increasing the number of admissions without taking the opinion of the department, as it takes place in a central way of admission and registration at the university	The university aiming for scientific cooperation and joint research with distinguished scientists with a high citation rate
Limited cooperation with the industrial and commercial sectors	Permission to attract international students
A large annual increase in the number of new entrants that is not proportional with the capacity of the building and the number of the academic staff	The existence of research centers, houses of expertise and business incubators with which agreements can be concluded and benefited from, such as the Research Center of King Faisal Specialist Hospital, King Abdullah International Medical Research Center at King Abdulaziz Medical City
Legalize government support for basic science research	The presence of administrative entities for the development of the university
Requiring faculty members to teach preparatory year students	KAUST University is close to the university, and research cooperation can be done with them
Lack of job opportunities for the department's graduates	Lack of a cadre of research assistants and postdoctoral researchers
	The presence of the Deanship of Information Technology and Distance Education and the University Education Development Center at the university provides continuous courses in electronic education technologies and professional development

# **CHAPTER III**

# **OPERATIONAL PLAN**



### Indicators of the Operational Plan of the Department of Biology (HAIAWI) 2018-2022 - Balanced Scorecard

		Indicators	Indicators				
NO.	Strategic goal	The type and name of the indicator	The current index value	The target index value	Responsible for implementation	Initiatives	
1	Developing creativity and distinction among faculty members and students	-Number of courses and workshops to spread the culture of innovation, patents and entrepreneurship annually -Number of students receiving awards annually	0 2	6 6	The Discovery and Care of the Gifted students committee	See initiatives from 1 to 3	
2	Developing undergraduate programs in accordance with the standards of academic accreditation locally and internationally and the 2030 vision	-The percentage of achievement in the requirements of academic accreditation -Percentage of graduates who are employed after graduation each year	30% N/A	80% %30	Quality and Development Committee	See initiatives from 4 to 6	
3	Enhancing the quality of on-campus, online, and distance learning	Percentage of Students' satisfaction with the quality of education -Percentage of employers' satisfaction with the efficiency of graduates -Percentage of Providing learning resources for each class	40% 50% 50%	60% 70% 80%	Assessment Quality Committee	See initiatives from 7 to 9	
4	Developing graduate studies programs and research outputs	Percentage of scientific papers published in internationally ranked journals per faculty member	N/A	60%	Graduate studies and scientific research committee	See initiatives from 10 to 14	
5	Empowering extracurricular activities and volunteer work	-Percentage of faculty members participating in community service -Percentage of students participating in community and voluntary activities	10% 40%	60% 60%	Community service committee	See initiatives from 15 to 17	
6	Establishing self-financing programs and initiatives	-Number of central labs for self-funding -Number of patents marketed annually -The value of the annual financial revenue	0 0 0	1 3 610,000	Entrepreneurship Committee	See initiatives from 18 to 20	

#### The first strategic goal: developing creativity and distinction among faculty members and students

Through spreading the culture of innovation, patents and entrepreneurship, and active participation in local and international competitions

No	Initiatives	Implementation mechanism	Responsible for implementation	Beneficiaries	The type and name of the indicator	Current index value	Target index value	Execution time	Follow-up mechanism
1	Enriching the culture of obtaining patents and local and international awards	<ol> <li>Conducting courses and workshops to spread the culture of innovation and patents</li> <li>Publishing advertisements for competitions in the field of innovation and creativity</li> </ol>	The Discovery and Care of the Gifted students committee	Faculty members, students	<ol> <li>1- Number of students receiving awards annually</li> <li>2- The number of faculty members who receive local and international awards annually</li> <li>3- Number of courses and workshops for innovation and patents annually</li> </ol>	2 3 0	6 10 6	2018-2022	Annual Report
2	Holding conferences, forums and seminars specialized in innovation	Establishing an annual forum to encourage innovation	The Discovery and Care of the Gifted students committee	Faculty members, students	An annual forum	0	1	2018-2022	Annual Report
3	Spreading the entrepreneurship culture	Organizing workshops, seminars, exhibitions and scientific posts to spread awareness of entrepreneurship in the department	Entrepreneurship Committee	Faculty members, students	Number of annual events	0	4	2018-2022	Quarterly report

# The second strategic goal: developing undergraduate programs in accordance with the standards of academic accreditation locally and internationally and the 2030 vision

By paying attention to the process of designing curricula according to the latest international standards and reviewing and updating programs on an ongoing basis to match the labor market

No	Initiatives	Implementation mechanism	Responsible for implementation	Beneficiaries	The type and name of the indicator	Current index value	Target index value	Execution time	Follow-up mechanism
4	Obtaining national and international accreditation for the department's programs for the undergraduate	<ol> <li>Apply the quality standards approved by the National Authority for Assessment and Accreditation.</li> <li>Complete the review of the program and course description</li> <li>Submitting to the National Accreditation Authority to approve the department's programs</li> </ol>	Quality and Development Committee	University, department, faculty, students	<ol> <li>The percentage of achievement in the academic accreditation requirements</li> <li>The number of academic programs accredited in the department</li> </ol>	%30 0	%80 3	2018-2022	Quarterly report
5	Development of educational programs for the undergraduate stage	<ol> <li>Forming a committee to review the curricula of each program</li> <li>Communicating with the Education Harmonization Center with the university's labor market to determine the skills to be included in the program</li> <li>Determining the specifications of the educational outputs to be approved by the labor market</li> </ol>	Quality and Development Committee	Faculty members, students	<ol> <li>1- The percentage of compatibility of the program with the labor market</li> <li>2- The number of programs that have been developed</li> <li>3- The percentage of students who have jobs in the labor market</li> </ol>	%60 0 N/A	%80 3 %80	2018-2022	Quarterly report
6	Create new programs required for the labor market	<ul><li>1- Forming a committee to prepare a plan to open programs required for the labor market</li><li>2- Submitting the officials to approve the program</li></ul>	Supervisors of programs	Students	1- The percentage of achievement in preparing the program 2- Launching the program	0 no	%100 yes	2018-2022	Annual Report

### Third strategic goal: Enhancing the quality of physical and electronic education and distance learning By developing and raising the quality of education in all its physical and electronic forms and education in the future

No	Initiatives	Implementation mechanism	Responsible for implementation	Beneficiaries	The type and name of the indicator	Current index value	Target index value	Executio n time	Follow-up mechanism
					<ol> <li>The level of student satisfaction with the quality of education</li> <li>The number of faculty members who</li> </ol>	%30	%90		· · ·
7	Providing courses to raise the quality of education	Providing courses and workshops in teaching quality and effective teaching	Assessment Quality Committee	Students	have obtained a diploma in professional development, awards for excellence in teaching, or training courses for modern teaching methods	20	80	2018-2022	Quarterly report
					3Percentage of Providing learning resources for each class	50%	70%		
		Giving training courses to faculty			1-Percentage of faculty members who are effective in using the blackboard and electronic tests	%50	%100		
8	Increasing the use of electronic technologies in teaching and testing	members on modern electronic technologies and their uses in education, communication with	Assessment Quality Committee	Students	2- The percentage of interaction between the professor and the student inside and outside the classroom	%40	%90	2018-2022	Quarterly report
		students and tests			3-Percentage of Providing learning resources for each class	%50	%80		
		Supervisor follow-up for field training students	Quality and		1- The percentage of students' satisfaction with the field training	50%	70%		
9	Raising the quality of field and practical training	Submitting a report on field training Providing practical and technical	Development Committee	Students	2- Percentage of students who obtained "A +" in field training	90%	100%	2018-2022	Quarterly report
		training in the field of specialization			3-Percentage of students who perform practical and technical training in the specialty	80%	100%		

#### The fourth strategic goal: To develop graduate studies programs and research outputs

### By raising the efficiency and quality of scientific research and graduate studies programs, and directing them to match local and international trends

No	Initiatives	Implementation mechanism	Responsible for implementation	Beneficiaries	The type and name of the indicator	Current index value	Target index value	Executio n time	Follow-up mechanism
10	Establishing quality programs to convoy with the labor market	<ul> <li>1- Conducting a comprehensive study of the programs related to the specialization and the needs of the labor market</li> <li>2- Establishing qualitative programs (diplomas and master)</li> </ul>	Graduate studies and scientific research committee	Students - the community	1- Number of interface programs 2-Percentage of students who enrol for postgraduate studies every year	0 5%	3 10%	2020-2022	Annual Report
11	Modernization and development of central laboratories	1- Determining the laboratory needs 2- Preparing laboratories as required	Graduate studies and scientific research committee	Faculty members, students	1- Number of research laboratories developed for postgraduate studies 2- Percentage of development of labs	0 %20	5 %80	2018-2022	Quarterly report
12	Award for the best active members in updating the database for their scientific research	<ol> <li>Announcing the conditions of the award</li> <li>Presenting the award for the best member site from each program</li> </ol>	Graduate studies and scientific research committee	Department, faculty	Percentage of members who update their sites	%10	%80	2021-2022	Annual Report
13	Establishing a support unit for researchers	1- Establishing a unit to support a scientific publishing	Graduate studies and scientific research committee	Faculty members, students	1- Percentage of beneficiaries' satisfaction 2- The number of members who benefit from the unit's support annually	0	%90 100	2018-2022	Quarterly report
14	Supporting faculty members to increase the publication of research in Q1, Q2 classified journals annually	1- Creating a database of scientific journals related to the specialty and classified Q1, Q2 annually	Graduate studies and scientific research committee	Faculty members	<ol> <li>The existence of a database of classified journals Q1, Q2 annually</li> <li>Percentage of scientific papers published in internationally ranked journals per faculty member</li> </ol>	No N/A	Yes 60%	2018-2022	Web link

#### The fifth strategic goal: To activate extracurricular activities and volunteer work

### Enhancing the department's role in community services and motivating faculty members and students to serve the community and volunteer work

No	Initiatives	Implementation mechanism	Responsible for implementation	Beneficiaries	The type and name of the indicator	Current index value	Target index value	Execution time	Follow-up mechanism
15	Establishing a community service unit	1- Establishing the unit and determining its female students and members	Community Service committee	Students - the community	Presence of the unit	No	Yes	2018	Report
16	Participation in local and international social and cultural events	1- Creating an annual calendar for local and international events 2- Motivating faculty members and students to attend and participate in community events	Community Service committee	Faculty members, students, society	<ol> <li>Percentage of faculty members</li> <li>participating in community service</li> <li>Percentage of students participating in</li> <li>community events</li> </ol>	%10 %50	%80 %100	2018-2022	Annual Report
17	Spreading the culture of participation in volunteer work	Introducing lectures and brochures on the importance of volunteering	Community Service committee	Faculty members, students, society	The number of lectures and brochures on the importance of volunteering annually	N/A	6	2018-2022	Annual Report

### Sixth strategic goal: Establishing self-financing programs and initiatives for the department

### Finding channels and means to assist in financial self-support to fulfill the requirements and needs of the department

No	Initiatives	Implementation mechanism	Responsible for implementation	Beneficiaries	The type and name of the indicator	Current index value	Target index value	Execution time	Follow-up mechanism
1	Patent manufacturing support	<ol> <li>Determining the names of the faculty members in the department who have patent certificates</li> <li>Communicating with Knowledge Economy and Technology Transfer, center to benefit from their experiences in marketing the patent</li> </ol>	Entrepreneurship Committee	The department, the society	1- The number of patents marketed annually 2- Annual revenues	0 0	5 500,000	2018-2022	Annual Report
2	Establishing self-financing central laboratories for the department	Establishing a central laboratory for each program	Entrepreneurship Committee	The department	1- Number of established laboratories 2- The annual revenue of the laboratories	0 0	1 10,000	2018-2022	Annual Report
3	Promote the establishment of houses of expertise	Establishing expertise houses	Entrepreneurship Committee	The department	1- Number of houses of expertise 2- The annual revenue of the expertise houses	0 0	3 100,000	2018-2022	Annual Report

### MECHANISM FOR PUBLISHING, MONITORING AND EVALUATING THE IMPLEMENTATION OF THE STRATEGIC PLAN OF THE DEPARTMENT OF BIOLOGICAL SCIENCES

1- After the plan is approved by the department and faculty councils, the details of the strategic plan and the implementation and follow-up mechanism will be announced

2- Upload the plan to the department's website

3- Printing the strategic plan's booklet and distributing it to program supervisors and heads of units and committees to participate in implementation and follow-up

4- Holding workshops to explain the axes of the strategic plan and the follow-up and implementation mechanism

5- Follow up on the implementation of the strategic plan and try to solve the obstacles and find available alternatives

6- Evaluate the achievement of programs and initiatives according to performance indicators to achieve the goals of the strategic plans periodically

7 - Preparing reports on the percentage of performance, achievement, obstacles and proposals (semi-annually / annually) for each program and initiative and submitting them to the head and supervisor of the department for presentation to the department council

The team of preparing and reviewing the strategic plan of the Department of Biology					
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