





المملكة العربية السعودية وزارة التعليم جامعة جازان كليسة العلسوم قسم الرياضيات

The Strategic Plan

For

The Department of Mathematics



2020-2025

College of Science, Jazan University

Kingdom of Saudi Arabia







المملكة العربية السعودية وزارة التعليم جسامعة جازان كليسة العلسوم قسم الرياضيات

Table of Contents

S. No	Topics	Page No
1	Introduction	3
2	A glimpse of the Mathematics Department through snapshots	4
3	The Organization Structure of Mathematics Department with Various Committees	5
4	Strategic plan development methodology	6
6	Vision, Mission, and Goals of the Mathematics Department	7
5	Basic perspectives of the strategic plan	8
6	The Mathematics Department's Balanced Scorecard	9
8	The First Perspective: Institutional capacity	10
9	Strategic goals initiatives and performance indicators	11
10	The Second Perspective: Internal operations	12
11	Strategic goals, initiatives and performance indicators	13
12	The Third Perspective: Resources	16
13	Strategic goals, initiatives and performance indicators	17
14	The Fourth Perspective: The Beneficiaries	18
15	Strategic goals, initiatives and performance indicators	20
16	Performance indicators of The Mathematics Department	19







Introduction:

The Department of Mathematics, College of Science, Jazan University is eager to build a strategy of sustainable development based on the concerned college's strategic plan (2020-2025) to fulfill the needs of the surrounding society as well as the labor market in the Jazan province. The present strategic plan created in accordance with the College of Science's strategic plan, which is in line with that of the strategic objectives of Jazan University's strategic plan (2020-2025) in the light of the Kingdom of Saudi Arabia's vision (2030) as well as the Ministry of Higher Education's strategic plan and with the requirements of the National Center for Academic Accreditation and Assessment (NCAAA) and the University System in Saudi Arabia.

About the Department of Mathematics:

The Department of Mathematics Degree at the College of Science, Jazan University was established in 2006 after the approval letter from the Ministry of Higher Education on 08-08-1426H (12-09-2005AD). A Bachelor of Science (B. Sc.) degree in Mathematics is awarded by the Department of Mathematics. The Department of Mathematics started offering a Master's degree in Mathematics since 2018. The Department seeks continuous development and improvement in teaching, scientific research and community services.

The Department of Mathematics takes the responsibility of Mathematics courses required by other programs of the College of Science such as, Chemistry, Physics, and Biology. The Departments also teach Mathematics, and Statistics courses at the Computer Science, Engineering, Pharmacy, and Management Colleges.

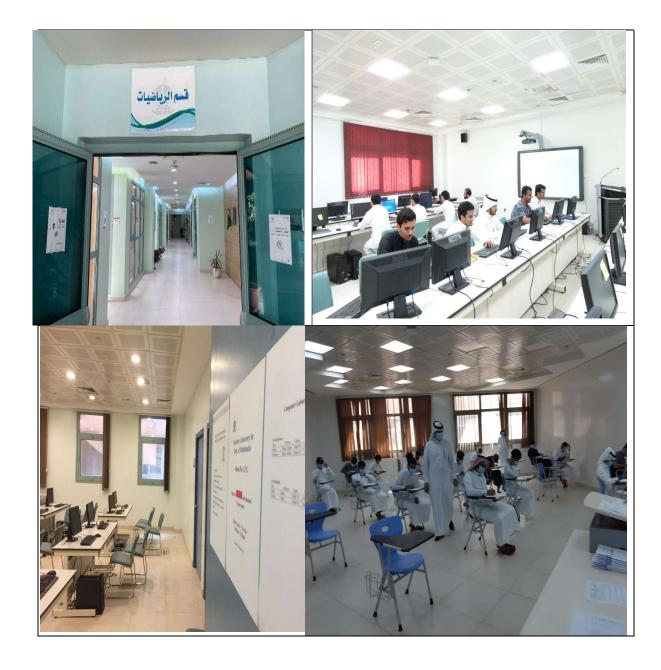






المملكة العربية السعودية وزارة التعليم جامعة جازان كليسة العلسوم قسم الرياضيات

A glimpse of the Mathematics Department through snapshots:



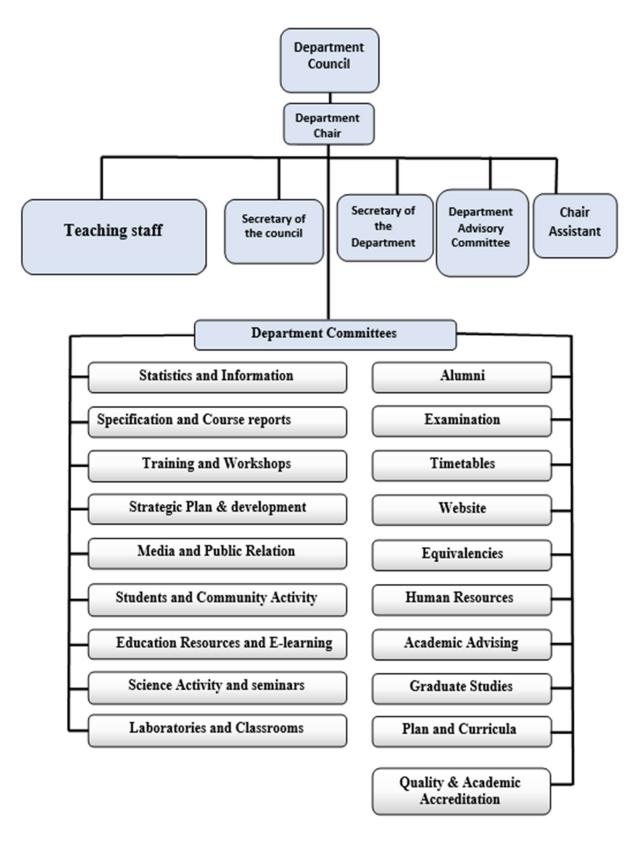






المملكة العربية السعودية وزارة التعليم جسامعة جازان كليسة العلسوم قسم الرياضيات

Organization Structure of Mathematics Department with Various Committees:









المملكة العربية السعودية وزارة التعليم جسامعة جازان كليسة العلسوم قسم الرياضيات

Strategic plan development methodology:

Proceeding from the Kingdom's vision 2030, the plan of the Ministry of Higher Education and the university system and the results achieved from the strategic plan of Jazan University 2015-2020 in anticipation of the reality of university education in the Jazan region, the Department of Mathematics was keen interested to prepare its strategic plan 2020-2025, which keeps pace with the changes in higher education and the labor market's need for manpower in current and future stage and reviewing the Department's vision, mission and values, whereby the Balanced Scorecard methodology was followed as an effective system and a unified framework for strategic planning and performance management in line with the university's strategic plan (2020-2025).

The strategic plan of the Mathematics Department is based on the four strategic directions from four perspectives that include ten strategic objectives that are measured through 43 key performance indicators (KPIs).

Strategic direction:

The Department's vision and mission have been written in a way that reflects the Department's ambition, as well as the development of strategic goals and initiatives to carry out the vision and mission.

Vision of Mathematics Department:

To achieve Excellences in various fields of Mathematics to meet competitiveness at the regional and the national levels of the Kingdom of Saudi Arabia through teaching, scientific research and community services.







Mission of Mathematics Department:

Produce qualified graduates in mathematics and motivate for scientific research to enrich and serve the surrounding society in light of the vision of the Kingdom of Saudi Arabia 2030.

Values of Mathematics Department:

Commitment to the university and college's recognized organizational values, which stem from the teachings of our religion and our established values and culture, in accordance with the college's strategic plan and striving to consolidate its concepts among the students and employees, as exemplified by the following:

Citizenship:	Cherishing national identity and realize social responsibility		
Affiliation:	A sense of commitment and initiative towards the goals and objectives of the Department.		
Responsibility:	Adherence to ethical standards and professional values.		
Excellence:	Application of standard practices and provision of quality services.		
Building Capacity:	Investing in Human Capital		
Teamwork:	Devoting the principle of cooperation and work with team-spirit.		

The strategic direction was established in accordance with the college's strategic plan, which is as follows:

- 1- Quality of teaching and learning.
- 2- Research efficiency and innovation.
- 3- The effectiveness of community participation.
- 4- Entrepreneurship and development







المملكة العربية السعودية وزارةالتعليم جسامعة جازان كليسة العلسوم قسم الرياضيات

In order to develop the Department strategic plan, the balanced score card of Mathematics Department (shown on page-9) was used in accordance with the College of Science and Jazan University methodologies, which include the following four perspectives:

<u>First perspective:</u> Institutional Capacity, It contains the following strategic objectives:

- 1. Providing a comprehensive and perfect education based on the Department's facilities and services.
- 2. Benefit from the College's information technology infrastructure and enhance it in the Department.
- 3. Activate and finalize the annual strategy plan for the Department.
- 4. Improving the competencies of the Department's human resources.

<u>Second perspective:</u> Internal operations which includes the following strategic objectives:

- 5. Providing a high-quality academic curriculum as well as a comprehensive and outstanding education based on modern educational methodologies.
- 6. Encourage faculty and students to participate in creative and multidisciplinary mathematics research.

Third perspective: Resources that includes the following strategic objectives:

7. Activating and strengthening the Department's educational, research, and training collaborations.

<u>Fourth Perspective:</u> The Beneficiaries which include the following strategic objectives:

- 8. Improving and developing the learning outcomes of the program, as well as the abilities of faculty and students.
- 9. Improving the graduates' efficiency in the Department.
- 10. Developing the Department's role in community service.









Balanced Scorecard for Mathematics Department

Vision	To achieve Excellences in various fields of Mathematics to meet competitiveness at the regional and the national levels of the			
	Kingdom of Saudi Arabia through teaching, scientific research and community services.			
Mission	Produce qualified graduates in mathematics and motivate for scientific research to enrich and serve the surrounding society			
	in light of the vision of the Kingdom of Saudi Arabia 2030.			
Strategic	Quality of teaching and learning	Research and innovation	The effectiveness of	Entrepreneurship and
directions		efficiency	community participation	development
Strategic results	A competent graduate and a	A supportive and stimulating environment	Effective community partnerships	Diversify sources of income to
	competitor in the labor market	that enhances the efficiency of research and		achieve financial sustainability
	•	scientific publishing		

	Strategic Goals	Performance indicators	Initiatives
Beneficiaries	Developing the department's role in community service Improving the graduates' efficiency in the department Improving and developing the learning outcomes of the program, as well as the abilities of faculty and students.	16	20
Resources	Activating and strengthening the department's educational, research, and training collaborations.		
Internal Operations	Encourage faculty and students to participate creative and multidisciplinary mathematics research Providing high-quality academic programs an providing comprehensive and exemplary educat based on modern educational strategies	17	16
Institutional Capacity	Improving the competencies of the department's HR Activate and finalize the annual strategy plan Benefit from the College's IT and enhance it in the department and services Providing a comprehensive and perfect education based on the department's facilities and services	11	11
Values	Citizenship, belonging, responsibility, excellence, capacity building, teamwork		







المملكة العربية السعودية وزارة التعليم جامعة جازان كليسة العلوم كليسة العلوم قسم الرياضيات

Strategic goals:

The strategic plan for the department of Mathematics outlines ten strategic goals for achieving the desired vision and mission. Key Performance Indicators are followed to monitor the performance. The department aims to achieve the following goals by 2025:

Perspective 1	Institutional Capacity				
Target: 1	Providing a compre	Providing a comprehensive and perfect education based on the Department's facilities and services			
Target Code	SCI 01 / MATH 01				
The Description	This goal is to develop the services provided within the educational environment and optimum utilization of the facilities and services in the department. To provide other facilities in order to meet the standard of the quality education. Providing suitable reading rooms for students and offices for faculty members and staff in the department. And, also provide academic facilities such as laboratories, classrooms and other essential resources for student's activities.				
	Strategic Alignment				
Department Goals		College Goals	University Goals		
education based	omprehensive and perfect on the Department's facilities and services	Provide comprehensive and optimal education based on the Faculty's facilities and services	Infrastructure development		

KPI's	Key Strategic Initiative
1- The percentage of occupation of classrooms and laboratories	Classrooms and laboratories management plan
2- The ratio of students to the number of classrooms	
3- Satisfaction of faculty and administrative staff about support services	Support Services Improvement Plan Initiative Measuring beneficiary satisfaction with support services







Perspective: 1	Institutional Capacity		
Target: 2	Benefit from the College's information technology infrastructure and enhance it in the Department.		
Target Code	SCI 02/ MATH 02		
The Description	This goal seeks to activate the technology and exploit technical infrastructure, in addition to ensure its effectiveness in using and supporting the integration and quality of data in its digital framework to serve the educational and administrative process, including systems supporting decision-making based on facts and data. Strategic Alignment		
Department Goals		College Goals	University Goals
	n the College's information technology ure and enhance it in the Department	Improving the Faculty's information technology structure.	Developing an IT infrastructure

	KPI's	Key Strategic Initiative
4.	Percentage of curricula and programs for which a digital version of	4. Providing courses and curricula on the Blackboard platform and
	their content has been created	its complete activation.
5.	The conversion rate for digital transactions	5.Develop qualitative training for the optimal use of electronic
6.	Percentage User satisfaction with information technology	platforms







Perspective: 1	Institutional Capacity			
Target: 3	Activate and finalize the annual strategy plan for the Department			
Target Code	SCI 03/ MATH 03			
The Description	This goal seeks to reach the Department achievements in its strategic plan.			
	-	Strategic Alignment		
Depart	Department Goals College Goals University Goals			
Activate and finalize the annual strategy plan for the Department		Verifying the completion of the Faculty's annual plans and its governance.	Developing university governance	

KPI's	Key Strategic Initiative
7. Percentage of achieved from the objective indicators in the	6. Follow up on the implementation of the strategic plan
strategic plan of Mathematics	







Perspective: 1	Institutional Capacity				
Target: 4	Improving the competencies of the Department's human resources				
Target Code	SCI 04/ MATH 04				
The Description	This goal is concerned with raising the level of academic competence of faculty members and				
	developing the administrative staff.				
	Strategic Alignment				
Depar	Department Goals College Goals University Goals				
Improving the	competencies of the	Improving the capabilities of human resources in	Improving human		
Department's human resources		the college	capabilities		

KPI's	Initiatives
Q Average number of professional development hours	7. Workshop implementation and execution in the Department.
8. Average number of professional development hours	8. Motivating teaching staff to attend training and workshops according to
completed by faculty members.	the training and development needs.
9.Percentage of faculty satisfaction with professional	9. Enhance the satisfaction of faculty staff regarding the training
development	provided
10. Average number of training hours for administrative staff	10. Motivating the administrative staff to attend courses and workshops
10. Average number of training hours for administrative staff	according the training and development needs.
11. Percentage of administrative staff satisfaction with	11. Enhance the satisfaction of Administrative staff regarding the training
professional development	provided.







Perspective: 2	Internal Operations				
Target: 5	Providing a high-quality academic curriculum as well as a comprehensive and outstanding education based on modern				
	educational methodologies.				
Target Code	SCI 05/ MATH 05				
The Description	This goal concentrates on the development of academic programs by improving teaching and learning methods in accordance with modern methods based on the use of student-centered strategies, developing complex skills such as critical thinking, understanding, discussion,				
	analysis, conclusion and working to	•	ional evaluation methods in accordance with mode Strategic Alignment	ern skills and acquired competencies	
	Department Goals		College Goals	University Goals	
Providing a high-quality academic curriculum as well Providing		high-quality academic programs and provide a ensive and optimal education based on modern educational strategies.	Improving academic programs		
KPI's			Initiatives		
12. Percentage of	faccredited academic programs		12. Program development to obtain program accreditation		
_	outstanding students with a GPA of 4 tal number of students	.5 in	13. Development of teaching aids in the program 14. Develop policies for dealing with low-grade students		
14. The percentag	ge of graduation within the specified	period			
15. The number of	of students who get 60% in each learn	ing exit PLO			
16. The dropout r	rate of students after the first year				
17. Student drop-out rate from academic programs					
18. First-year student retention rate					
19. Students to faculty ratio		15. Adjusting the ratio between students and faculty members to reach the ideal target ratios for the program			
20.Percentage of graduates with jobs		16. Providing courses for graduates and keep a direct contact with them.17. Develop plans and curricula for the program to raise the level of learning outcomes			







كة العربية السعودية	لمما
وزارةالتعليم	
امعة جازان ايسة العلسوم	
قسم الرياضيات	

21. Percentage of faculty members holding a doctorate degree	18. Attracting distinguished members to join the program19. Increasing the scholarship	
22. Percentage of passing standard and professional exams	20. Preparing courses and workshops to prepare students for standardized tests	

Perspective: 2	Internal Operations			
Target: 6	Encourage faculty and students to participate in creative and multidisciplinary mathematics research			
Target Code	SCI 06/ MATH 06			
The Description	This goal seeks to encourage faculty and students to participate in creative and multidisciplinary mathematics research.			
		Strategic Alignment		
Dep	artment Goals	College Goals	University Goals	
Encourage faculty and students to participate in creative and multidisciplinary mathematics research		Encouraging faculty members and students and engaging them in innovative and interdisciplinary research.	Increase support for scientific research and innovation	

KPI's	Initiatives	
23.Percentage of scientific publication	21. Determining the needs of faculty members and conducting workshops and seminars in order to improve scientific publishing	
24. Average citations in refereed journals per faculty member	22. Encouraging research partnerships with competing programs in other universities	
25.The number of research published in ISI	23. Encouraging research cooperation between program members in various headquarters	
26.Number of research papers classified in Scopus	(headquarters and branches)	
···	24. Inviting distinguished faculty members in the field of scientific research to give lectures	
27. Number of research partnerships	25. Increasing Research Partnerships And the Financial support	
28. Number of innovations and entrepreneurship	26. Support innovation, patent registration and intellectual property rights	







Perspective: 3	Resources				
Target: 7	Activating and	Activating and strengthening the Department's educational, research, and training collaborations			
Target Code		SCI 07/ MATH 07			
The Description	This goal focuses on the strengthening partnerships and cooperation with the authorities related to the provision of				
	services education and student employment and training.				
		Strategic Alignment			
De	epartment Goals	College Goals	University Goals		
Activating and strengthening the		Creating and strengthening cooperation and			
Department's educational, research, and		partnerships and guiding students to take	C441		
training collaborations		advantage of training opportunities from	Strengthening investment partnerships		
	-	relevant authorities			

KPI's	Initiatives
29. Number of conventions and research partnerships obtained	27. Increase the Educational and training partnership agreements in the Department
in the Mathematic Department	28. Establishing partnerships with corresponding programs and distinguished research centers
30. Number faculty and Students who are sponsored by the	29. Activating partnerships in scientific research and providing scientific advice to the public and
relevant authorities	private sectors







Perspective: 4	Beneficiaries				
Target: 8	Improving and developing the learning outcomes of the program, as well as the abilities of faculty and students				
Target Code		SCI 08/ MATH 08			
The Description	This goal seeks to improve	This goal seeks to improve educational processes and develop students' professional and technical skills to suit the requirements of the labor market.			
	Strategic Alignment				
Depar	tment Goals	College Goals	University Goals		
Improving and developing the learning outcomes of the program, as well as the abilities of faculty and students		Improving and developing program learning outcomes and developing student skills to suit labor market requirements	Improving the student experience		

KPI's	Initiatives
31. The student's assessment of the quality of learning in the courses	31. Optimizing the modern teaching aids in the program and making them available to the students
32. Student assessment of the quality of education in the programs	32. Increasing student representation in the various Department committees. 33. Activating the student's participation in the periodic councils of the program management
33. Student satisfaction with learning resources	34. Providing specialized and modern libraries in all areas of the program.35. Optimizing the activation of the electronic learning aids in the program and making them available to the students
34. Student satisfaction with the services provided	36. Improving the quality of self-service provided to students
35. Number of courses and workshops offered to the student	37. Improving and implementing the plan of the courses offered to the student
36. Percentage of faculty satisfaction with professional development	38. The opinion of the teaching staff about their satisfaction with the training programs provided
37. Employers' evaluation of the Department's graduates' competency	39. Employers survey







Perspective: 4	Beneficiaries			
Target: 9	Improving the graduates' efficiency in the Department			
Target Code	SCI 09/ MATH 09			
The Description	This goal focuses on linking and aligning the Department's outputs with the needs of the labor market by expanding the absorptive capacity of priority specializations, and developing programs to focus on Future skills, labor market needs and requirements of the industrial revolution.			
		Strategic Alignment		
Depa	Department Goals College Goals University Goals			
Improving the graduates' efficiency in the		Improving the efficiency of college	Improving the efficiency of	
De	Department graduates university outputs			

KPI's	Initiatives
37. Employers' evaluation of the efficiency of the Department's graduates	40. Employers survey
12. Number of accredited academic programs	41. Seeking academic accreditation for the program
22. Standardized and professional test results	42. Providing courses to develop the skills of graduates or those who are about to graduate.
	43. Providing career guidance, technical support and expertise to graduates before they join the labor market.
	44. Seeking to provide professional courses and practical training for students of the Department
38.Percentage of graduates who are employed	1. Providing courses to develop the skills of graduates or those who are about to graduate
39. Graduate enrollment rate in postgraduate programs	46. Develop the student's skills in the use of computer softwares.
	47. Developing the educational and research infrastructure.
	48. Develop student research skills







Perspective: 4	Beneficiaries				
Target: 10	Developing the Department's role in community service				
Target Code	SCI 10/ MATH 10				
the description	This goal seeks to provide community services to all segments of society in the fields of mathematics.				
	Strategic Alignment				
Depar	Department Goals College Goals University Goals				
Developing the Department's role in		Providing services that meet the needs of society	Improving community service		
commu	community service and improve the quality of life and quality of life				

KPI's	Initiatives	
40. The total number of volunteer hours done by the students in the		
Department	49. Encouraging and motivating students and teaching staff to serve the	
Beneficiaries' satisfaction with community services		
42. The total number of volunteer hours done by the teaching staff in the	community.	
Department		
43. Number of community programs and initiatives	50. Introducing the program through social media and the Department's website	
	51. Introduce the mathematics program for high school middle and	
	elementary students.	







المملكة العربية السعودية وزارة التعليم جسامعة جازان كليسة العلوم قسم الرياضيات

Performance indicators:

Perspective	Target	KPI's
Institutional Capacity	Providing a comprehensive	The percentage of occupation of classrooms and laboratories
	and perfect education based	2. The ratio of students to the number of classrooms
	on the Department's facilities and services.	Satisfaction of faculty and administrative staff about support services
	Benefit from the College's information technology	Percentage of curricula and programs for which a digital version of their content has been created
O_{i}	infrastructure and enhance it	5. The conversion rate for digital transactions
onal	in the Department.	6. Percentage User satisfaction with information technology
nstituti	Activate and finalize the annual strategy plan for the Department.	
	Improving the competencies	Average number of professional development hours completed by faculty members.
	of the Department's human	9. Percentage of faculty satisfaction with professional development
	resources.	10. Percentage of faculty satisfaction with professional development
		11. Average number of training hours for administrative staff
Internal Operations		12. Percentage of accredited academic programs
	Providing a high-quality academic curriculum as well	13. Percentage of outstanding students with a GPA of 4.5 in relation to the total number of students
	as a comprehensive and	14. The percentage of graduation within the specified period
	outstanding education based on modern educational	15. The number of students who get 60% in each learning exit PLO
	methodologies.	16. The dropout rate of students after the first year
	9	17. Student drop-out rate from academic programs







epartment or iviathema	illes	
		18. First-year student retention rate
		19. Students to faculty ratio
		20. Percentage of graduates who are employed
		21. Percentage of faculty members holding a doctorate degree
		22. Percentage of passing standard and professional exams
	Encourage faculty and	23. Percentage of scientific publication for faculty members
	students to participate in	24. Average citations in refereed journals per faculty member
	creative and	25. The number of research published in ISI
	multidisciplinary	26. Number of research papers classified in Scopus
	mathematics research.	27. Number of research partnerships
		28. Number of innovations and entrepreneurship
Resources	Activating and strengthening the Department's	29. Number of conventions and research partnerships obtained in the Mathemat Department
	educational, research, and training collaborations.	30. Number faculty and Students who are sponsored by the relevant authorities
	Improving and developing	31. Students' evaluation of the quality of learning in courses
	the learning outcomes of the	32. Students' evaluation of the quality of education in the programs
	program, as well as the	33. Student satisfaction with learning resources
∞	abilities of faculty and	34. Student satisfaction with the services provided
\mathbf{j}	students.	35. Number of courses and workshops offered to students
ia.		36. Evaluation of employers for graduates of the Department
fic		37. Employers' evaluation of the Department's graduates' competency
je]		12.Number of accredited academic programs
Beneficiaries	Improving the graduates' efficiency in the Department.	22.Standardized and professional test results
		38. Percentage of graduates who are employed
		39. Enrolment of graduates in postgraduate programs
		40. The total number of volunteer hours done by the students in the Department
		41. Beneficiaries' satisfaction with community services
	,	· · · · · · · · · · · · · · · · · · ·







Developing the Department's role in community service.	42. The total number of volunteer hours done by the teaching staff in the Department
	43. Number of community programs and initiatives