#### بسم الله الرحمن الرحيم



# THE HASHEMITE UNIVERSITY Faculty of Science Strategic Plan

### 2017-2022

#### **INTRODUCTION**

The Hashemite University is at a critical point in its history since the beginning of teaching in 1995. There are forces at play that will lead to major changes in research, teaching, and administration. Some of the changes – including reduced governmental funding, responsibility-Non-centralized budgeting, online learning, technology adoption (for example, using electronic system for administration and archiving), and evolving work place – are already happening to various degrees. The pace of change will accelerate, and the future will favor the brave and the nimble.

The Faculty of Science will be, in part, a bystander to some of the upheaval happenings. The Hashemite University may make institutional decisions in some of these areas, and in those cases, we need to think about how to strategically follow their lead. The Faculty is trying to grasp the opportunities to lead at the institutional, national, and (if we are lucky) international level.

We do not need a crystal ball to see into the future to know exactly how our compass is pointing. However, we have to identify the right direction, start moving in that direction, and be nimble about making changes in study plans, launching e-courses, activating research groups, etc. In this new and evolving world, international reputations can be quickly earned by being at the forefront of new developments, or opportunities lost by failing to do so.

While part of the Faculty of Science Strategic Plan involves setting the stage for the future, the majority of the recommendations (as SWOT analysis indicates) concern getting our house in order. The Faculty is doing well by some of the metrics. However, there are some key areas of concern and the strategic plan is intended to tackle them head on. Strengthening our research, teaching, and administrative functions puts us in a better position to grow our reputation (locally and internationally) and reach the heights of excellence.

This Strategic Plan is in alignment with this vision. However, our plan emphasizes the priorities of the Faculty of Science. Many of the objectives in the University's plan, while important and supported by the Faculty, are not on the critical path towards making Science stronger. It must be noted that SWOT analysis for the elements of internal and external environments has been conducted to specify the goals and strategic objectives for each goal. Our goals meet those of the University strategic goals:

Strategic Goal 1: Developing the Scientific Research and Graduate Studies

Strategic Goal 2: Obtaining International Accreditation and Quality Assurance Certificates for

**Bachelor Degree Programs** 

**Strategic Goal 3:** The Good University Governance

Strategic Goal 4: The Student Environment in University

**Strategic Goal 5:** The Globalization

An Action plan is required to achieve these goals. The Members of Faculty (Dean, Vice Dean, Assistant Dean, Chairpersons of Departments in addition to all Members of Academic Staff) are committed to implement the action plan and to develop it.

#### **VISION**

The faculty of science aims to be the best developed, advanced, and the most innovative in its academic and scientific research programs that conforms to the best international standards. It also aims to create distinguished and capable graduates to fulfill the needs of the local society currently and in the upcoming future.

#### **MISSION**

The faculty of science aims to develop superior academic undergraduate and graduate programs that are responsive to the needs of evolving workplace and to economic and social innovation. It also aims to develop academic and research collaborations with industry and community that stimulate and enhance the sustainable social and economic progress.

#### **CORE VALUES**

We believe in the necessity of respecting the Islamic and Arabic values, loyalty to our country and the Hashemite leadership. We also believe in developing and enhancing the professional and academic ethics; acknowledging sincerity and tolerance; accepting others; condemning selfishness and individualism; enhancing the transparency; spreading knowledge; creating the spirit of cooperation among the students and employees at the university and rooting all these values in the students, the staff and the employees of faculty.

#### **AIMS**

- Offering distinguished education and provide scientific leaders capable to cope with the international scientific and technological progress.
- Enhancing the ability to critical thinking and be committed to the long-life learning
- Encouraging and enriching the ability to maintain scientific knowledge
- Encouraging the correlation between faculty of science and local community through fulfilling its progressive needs.
- Encouraging the participation in local and international forums and conferences
- Encouraging the extra curriculum activities that enhance the good image of the faculty
- Sustaining the development of scientists and their skills in a way that enable them to expose the students, in both graduate and undergraduate levels, to the up-to-date scientific advancements

#### SWOT Analysis (Strengths, Weaknesses, Opportunities, Threats)

#### **Strengths**

Serial	(Strengths)	Impact Score	Certainty Score	Priority
1	Highly qualified teaching Staff is available	5	5	10
2	Diversity of specialties of academic staff members and their scientific institutions	5	4	9
3	Well-equipped research laboratories	4	4	4
4	Good teaching laboratories do exist	4	4	5
5	Graduate studies programs are diverse	4	3	6
6	Library is distinguished and contains good databases and diverse books	4	4	7
7	Outstanding support from the administration of University	5	4	8
8	Adopting distinguished curricula and courses that meet the international standards	5	5	1
9	Utilizing the recent teaching methods	4	4	2
10	Spirit of team work does exist among faculty staff	4	3	3

#### Weaknesses

Serial	(Weaknesses)	Impact Score	Certainty Score	Priority
1	The ratio of students to academic staff members is not up to the best standard	2	1	4
2	Academic load of staff members is relatively high	3	2	3
3	The cost of credit hour is relatively high in some specialties	4	3	5
4	The equipments of research laboratories are still not up to the international standards	3	2	2
5	The number of teaching laboratories and their corresponding space do not match the huge number of students	4	4	1

#### **Opportunities**

Serial	Opportunities	Impact Score	Certainty score	Priority
1	Internal and external funding for research do exist	5	4	1
2	Possible collaborative work between faculty departments and local industry	4	2	3
3	Existence of research equipments in University centers and other research centers outside the University	4	4	2
4	Training workshops for academic members of staff	3	3	4
5	Distinguished relationship between faculty and University administration	3	3	5

#### **Threats**

Serial	Threats	Impact Score	Certainty score	Priority
1	Low academic standards of admitted students in the Faculty	4	3	5
2	Inconvenience in the design of Classrooms	5	5	3
3	Weakness in the service of assistance units	5	4	4
4	Large number of graduates from other public and private Universities that have difficulties to get jobs	5	4	7
5	Weakness in the instructions and regulations of promotion of academic staff members	5	3	1
6	Deficiency in the databases of Faculty specialties	3	3	6
7	Deficiency in funding Scientific research from private sector	4	4	2

# **Strategic Plan for Faculty of Science Goals, Objectives & Strategies**

#### Strategic Goal 1: Developing the Scientific Research and Graduate Studies

#### Main Strategic Objective 1/1: Developing Research Laboratories

Strategic Objective 1/1/1: Increasing Funds for Research work in Faculty and Obtaining More Support for

Research Work Funded by Local, Regional and International Institutions

Strategic Objective 1/1/2: Increasing the Efficiency of Collaborative Work with Assistance Units

Strategic Objective 1/1/2: Conducting Periodic Calibration and Maintenance of the Scientific Instruments

Strategic Objective 1/1/3: Upgrading the Efficiency of Research Laboratories and Increasing their Number

#### Main Strategic Objective 2/1: Developing the Research Capabilities of Academic Staff Members

**Strategic Objective 1/2/1:** Increasing the Opportunities of Attending International Conferences, Workshops and Forums; Conducting Collaborative Scientific Research with Distinguished Researchers from International Institutions.

**Strategic Objective 1/2/2:** Increasing the Opportunities of Academic Staff Members to Focus on Research Work by Reducing their Academic Load

Strategic Objective 1/2/3: Organizing Scientific Conferences and Workshops

Strategic Objective 1/2/4: Subscribing in Scientific Databases and Periodicals

**Strategic Objective 1/2/5:** Initiating New Graduate Studies Programs

Strategic Objective 1/2/6: Developing the Legislative Environment that Supports Scientific Research

#### Main Strategic Objective 2/1: Developing the Programs of Graduate Studies

Strategic Objective 1/3/1: Developing Curricula of Graduate Studies

**Strategic Objective 1/3/2:** Collaborating with Distinguished Professors from International Universities in order to improve the Programs of Graduate Studies

Strategic Objective 1/3/3: Developing the Measures of Assessment for Graduate Studies Programs

Strategic Objective 1/3/4: Rectifying the Instructions of Admission for Graduate Students

# Strategic Goal 2: Obtaining International Accreditation and Quality Assurance Certificates for Bachelor Degree Programs

#### Main Strategic Objective 2/1: Developing Curricula of Bachelor Degree Programs

Strategic Objective 2/1/1: Conducting Periodic Revision and Development of Curricula and Improving

Courses to Fulfill the Needs of Evolving Workplace

Strategic Objective 2/1/2: Updating the Scientific References Periodically

Strategic Objective 2/1/2: Introducing Large Number of E-Courses to the Students

#### Main Strategic Objective 2/2: Increasing the Number of Academic Staff Members

Strategic Objective 2/1/2: Recruiting New Distinguished Academic Staff Members

Strategic Objective 2/2/2: Funding Distinguished Students for PhD Scholarships

Strategic Objective 2/2/3: Maintaining Stable Environment for Academic Staff Members by Improving their

Conditions

Main Strategic Objective 2/3: Shaping the Personality of Students by Providing them with the Necessary Skills that Allow them to Engage with Community

Strategic Objective 2/3/1: Rooting the Societal Values of Accepting Others, Creating the Spirit of Democracy and Implementing the Loyalty of Students to their Country and Leadership

Strategic Objective 2/3/2: Developing Students Communication Skills

Strategic Objective 2/3/3: Introducing Training Programs for Expected Graduates

Main Strategic Objective 2/4: Updating Teaching and Research Laboratories with Advanced Instruments and Increasing the Number of Laboratories.

Strategic Objective 2/4/1: Providing Teaching and Research Laboratories with Advanced Instruments
Strategic Objective 2/4/2: Allocating More Money for Improving Assistance Units of Faculty and Teaching
Facilities

Main Strategic Objective 2/5: Updating Teaching Facilities and Improving Classrooms

Strategic Objective 2/5/1: Furnishing the Class Rooms with Up-to-date Teaching Facilities
Strategic Objective 2/5/2: Increasing the Number of Allocated Classrooms for each Department of Faculty
Strategic Objective 2/5/3: Calibrating and Maintaining the Teaching Instruments and Rehabilitating the
Technical Staff

Main Strategic Objective 2/6: Rehabilitating Academic Staff Members and Improving their Teaching Skills

Strategic Objective 2/6/1: Encouraging Staff Members to Attend E-Learning Workshops

Strategic Objective 2/6/2: Participating in Workshops on Advanced Teaching Methods
Strategic Objective 2/6/3: Encouraging Academic Staff Members and their Assistants to Attend Training
Workshops on Advanced Teaching Methods

#### **Strategic Goal 3:** The Good University Governance

Main Strategic Objective 3/1: Rehabilitating the Academic and Administrative Leaders of Faculty

**Strategic Objective 3/1/1:** Encouraging Academic and Administrative Leaders to Attend Training Workshops on Governance

**Strategic Objective 3/1/2:** Supporting the Academic and Administrative Leaders to Attend International Workshops on University Governance

Main Strategic Objective 3/2: Implementing the Electronic System for University Governance

**Strategic Objective 3/2/1:** Participate in Computerizing the Administrative, Financial and Academic System of Faculty

Strategic Objective 3/2/2: Archiving all Faculty Documents of Previous Years

#### Strategic Goal 4: The Faculty Student Environment

#### Main Strategic Objective 4/1: Shaping Students Personality by Rooting the Democratic Practices

**Strategic Objective 4/1/1:** Holding Forums and Seminars to Educate Students with the Democratic Practices

**Strategic Objective 4/1/2:** Rehabilitating and Teaching the Leaders of Students to Implement the Democratic Practices

Main Strategic Objective 4/2: Developing the Process of Forming the Councils, Clubs and Forums of Students

**Strategic Objective 4/2/1:** Following up the Rectification of Instructions and Regulations related to the Councils, Clubs, and Forums of Students

#### Main Strategic Objective 4/3: Increasing the Exracurriculum Activities of Students

Strategic Objective 4/3/1: Initiating Different Athletic Activities for the Students

Strategic Objective 4/3/2: Introducing Versatile Cultural Activities

Strategic Objective 4/3/3: Initiating Different Artistic Activities for the Students

## Main Strategic Objective 4/4: Developing Positive Attitudes of Students towards Administrative and Academic Staff Members

**Strategic Objective 4/4/1:** Holding Periodic Meetings between Academic Staff Members and Students

**Strategic Objective 4/4/2:** Activating Students Participation in Administrative and Academic Councils of Faculty

## Main Strategic Objective 4/5: Improving Communication between Students of Faculty and Community

**Strategic Objective 4/5/1:** Encouraging Students to Participate in Different Community and Academia Services

Strategic Objective 4/5/2: Enhancing the role of Students in Local Community Institutions Strategic Objective 4/5/3: Encouraging the Students to Implement Projects that Help in Solving Local Community Problems

Main Strategic Objective 4/5: Providing Assistance to the Foreign Students and Enhancing the Attractive Environment for them

Strategic Objective 4/6/1: Forming the Councils and Forums for Foreign Students

Strategic Objective 4/6/2: Incorporating the Activities of Foreign Students with those of Local

**Students** 

Strategic Objective 4/6/3: Holding Joint Meetings between Jordanian and Foreign Students

Strategic Objective 4/6/4: Providing Attractive Services for Foreign Students

#### **Strategic Goal 5:** The Globalization

Main Strategic Objective 5/1: Forming Quality Assurance and Accreditation Committees to follow up the Process of International Classifications of Universities

Strategic Objective 5/1/1: Initiating the collaboration between Quality Assurance and Accreditation Committees with the University Office of Globalization

**Strategic Objective 5/1/2:** Updating the Faculty data with that of University Data Necessary for International Classification of the University

**Strategic Objective 5/1/3:** Participating in the International Conferences related to International Classification

**Strategic Objective 5/1/5:** Providing Faculty Dean with the Feedback about the International Classification and Introducing Suggestions

Main Strategic Objective 5/2: Implementing the awareness of Globalization in the Faculty

Strategic Objective 5/2/1: Improving the Academic System
Strategic Objective 5/2/2: Improving the Administrative System
Strategic Objective 5/2/3: Holding the Workshops in Globalization at the University
Strategic Objective 5/2/1: Collaborating with Academic Staff Members and Presidency Office to Achieve the Requirements of International Classification