

**Ministry of Higher Education and Scientific Research  
Scientific Supervision and Scientific Evaluation Apparatus  
Directorate of Quality Assurance and Academic Accreditation  
Accreditation Department**



# **Academic Program and Course Description Guide**

**2024**

## **Introduction:**

The educational program is a well-planned set of courses that include procedures and experiences arranged in the form of an academic syllabus. Its main goal is to improve and build graduates' skills so they are ready for the job market. The program is reviewed and evaluated every year through internal or external audit procedures and programs like the External Examiner Program.

The academic program description is a short summary of the main features of the program and its courses. It shows what skills students are working to develop based on the program's goals. This description is very important because it is the main part of getting the program accredited, and it is written by the teaching staff together under the supervision of scientific committees in the scientific departments.

This guide, in its second version, includes a description of the academic program after updating the subjects and paragraphs of the previous guide in light of the updates and developments of the educational system in Iraq, which included the description of the academic program in its traditional form (annual, quarterly), as well as the adoption of the academic program description circulated according to the letter of the Department of Studies T 3/2906 on 3/5/2023 regarding the programs that adopt the Bologna Process as the basis for their work.

In this regard, we can only emphasize the importance of writing an academic programs and course description to ensure the proper functioning of the educational process.

## **Concepts and terminology:**

**Academic Program Description:** The academic program description provides a brief summary of its vision, mission and objectives, including an accurate description of the targeted learning outcomes according to specific learning strategies.

**Course Description:** Provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the students to achieve, proving whether they have made the most of the available learning opportunities. It is derived from the program description.

**Program Vision:** An ambitious picture for the future of the academic program to be sophisticated, inspiring, stimulating, realistic and applicable.

**Program Mission:** Briefly outlines the objectives and activities necessary to achieve them and defines the program's development paths and directions.

**Program Objectives:** They are statements that describe what the academic program intends to achieve within a specific period of time and are measurable and observable.

**Curriculum Structure:** All courses / subjects included in the academic program according to the approved learning system (quarterly, annual, Bologna Process) whether it is a requirement (ministry, university, college and scientific department) with the number of credit hours.

**Learning Outcomes:** A compatible set of knowledge, skills and values acquired by students after the successful completion of the academic program and must determine the learning outcomes of each course in a way that achieves the objectives of the program.

**Teaching and learning strategies:** They are the strategies used by the faculty members to develop students' teaching and learning, and they are plans that are followed to reach the learning goals. They describe all classroom and extra-curricular activities to achieve the learning outcomes of the program.

## Academic Program Description Form

**University Name: Basrah**

**Faculty/Institute: College of Administration and Economics**

**Scientific Department: Statistics**

**Academic or Professional Program Name: Bachelor's degree in Statistics.**

**Final Certificate Name: Bachelor's degree in Statistics.**

**Academic System: semester**

**Description Preparation Date: 2024/2/22**

**File Completion Date: 2024/2/22**

**Signature:**

**Head of Department Name:**

**Prof. Dr. Bahaa Abdul Razaq Kasiem**

**Date:**

**Signature:**

**Scientific Associate Name:**

**Assis Prof. Dr. Ammar Yousif Dhicher**

**Date:**

**The file is checked by:**

**Department of Quality Assurance and University Performance**

**Director of the Quality Assurance and University Performance Department:**

**Date:**

**Signature:**

**Approval of the Dean**

## **1. Program Vision**

The College of Administration and Economics at the University of Basra aspires to be among the ranks of distinguished colleges globally in the economic, administrative, accounting, statistical and financial fields and to be distinguished scientifically and administratively and in the quality of service it provides to society and stakeholders at the national, Arab and international levels and to be committed to the academic professional culture among the ranks of academics and employees. In addition to pursuing development prospects in the university academic aspects (education, research, and service).

## **2. Program Mission**

The College of Administration and Economics at the University of Basra seeks to provide the best service to the community and parties that exchange interests and benefits with it, and with the university through accurate diagnosis of their current and future needs and achieving an effective and efficient response to these needs and expectations by ensuring the quality of all university operations and practices (educational, research, advisory, and administrative) according to the following:

1. The best investment of the college's resources and energies through effective commitment to implementing the provisions of the quality assurance and academic accreditation system.
2. Improving the performance of human resources (academic and functional) through participation in specialized and advanced teaching and development courses inside and outside the country.
3. 3. Preparing plans and programs that include using the resources (material, financial, and technical) available to the college to improve the college's overall performance.

## **4. Program Objectives**

The College of Administration and Economics at the University of Basra seeks to provide the best service to the community and parties that exchange interests and benefits with it, and with the university through accurate diagnosis of their current and future needs and achieving an effective and efficient response to these needs and expectations by ensuring the quality of all university operations and practices (educational, research, advisory, and administrative) according to the following:

1. The best investment of the college's resources and energies through effective commitment to implementing the provisions of the quality assurance and academic accreditation system.
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## 5. Program Accreditation

none

## 6. Other external influences

none

## 7. Program Structure

Program Structure	Number of Courses	Credit hours	Percentage	Reviews*
Institution Requirements	none		none	
College Requirements	none		none	
Department Requirements				
Summer Training				
Other	Linear Programming –Semester1	3	98%	

\* This can include notes whether the course is basic or optional.

## 8. Program Description

Year/Level	Course Code	Course Name	Credit Hours	
			theoretical	practical
2023-2024/ The Third stage	STB214	Linear Programming	2	1

## 9. Expected learning outcomes of the program

### knowledge

The course aims to build the statistical personality within the applied and analytical fields for the students of the Statistics Department by introducing them to the most important methods and methods adopted in dealing with the problems facing systems and institutions through building mathematical models and finding their optimization, and then studying the sensitivity of the models to modification or change, which contributes to supporting decision makers. In finding the optimal policy.

### Skills

The ability to construct and analyze problems for all systems by adopting linear programming methods that contribute to supporting the decisions of decision makers.

### Ethics

Developing the student's academic personality so that he has the ability to think, analyze, and make decisions regarding statistical and non-statistical issues.

## 10. Teaching and Learning Strategies

1. Adopting the theoretical basis and providing the student with all the vocabulary of the curriculum.
2. Adopting the discussion method by presenting some ideas during the lecture so that it develops the student's ability to understand the topic directly.
3. Providing applied examples through digital examples that simulate the topics covered in theory so that the student's knowledge picture is complete in theory and practice.
4. Adopting the immediate examination method (written and analytical) to develop the spirit of competition among students.
5. Adopting the assignment method after completing any topic within the specified academic vocabulary

## 11. Evaluation methods

Ability to model and analyze using statistical programs and higher programming languages

## 12. Faculty

### Faculty Members

Academic Rank	Specialization		Special Requirements/Skills (if applicable)	Number of the teaching staff	
	General	Special		Staff	Lecturer
lecturer	Statistics	Applied Statistics & Statistics modeling	Ability to model and analyze using statistical programs and higher programming languages	A permanent Staff	

## Professional Development

### Mentoring new faculty members

Briefly describes the process used to mentor new, visiting, full-time, and part-time faculty at the institution and department level.

### Professional development of faculty members

Briefly describe the academic and professional development plan and arrangements for faculty such as teaching and learning strategies, assessment of learning outcomes, professional development, etc.

## 13. Acceptance Criterion

(Setting regulations related to enrollment in the college or institute, whether central admission or others)

#### 14. The most important sources of information about the program

Operation Research introduction

Prof .Dr. Hamdy Taha – 8<sup>th</sup> Ed.

Model Building in Mathematical programming

H. Paul Williams – 5<sup>th</sup> Ed

Operations research concept and application

Hamed S. Noor Al-Shemerty

تطبيقات بحوث العمليات في ادارة الاعمال

د. صالح مهدي العامري و د. عواطف ابراهيم الحداد

#### 15. Program Development Plan



### Program Skills Outline

				Required program Learning outcomes											
Year/Level	Course Code	Course Name	Basic or optional	Knowledge				Skills				Ethics			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
2023-2024	STB214	Linear Programming	Basic												

Please tick the boxes corresponding to the individual program learning outcomes under evaluation.

## Course Description Form

<b>1. Course Name: Linear Programming</b>					
<ul style="list-style-type: none"> <li>• An introductory introduction to the importance of linear programming and its mathematical models</li> <li>• Types of mathematical models for linear programming and how to build them</li> <li>• Methods used to find the optimal solution for linear programming models</li> <li>• Testing and analyzing the sensitivity of the optimal solution to a linear programming problem</li> </ul>					
<b>2. Course Code:</b>					
STB214					
<b>3. Semester / Year:</b>					
2023-2024					
<b>4. Description Preparation Date:</b>					
22-2-2024					
<b>5. Available Attendance Forms:</b>					
Semesters - Semesters 1					
<b>6. Number of Credit Hours (Total) / Number of Units (Total)</b>					
30 and 3 units					
<b>7. Course administrator's name (mention all, if more than one name)</b>					
Name: L. Ahmed Husham Mohammed Albasri Email: <a href="mailto:ahmed.albasrai@uobasrah.edu.iq">ahmed.albasrai@uobasrah.edu.iq</a>					
<b>8. Course Objectives</b>					
			<ul style="list-style-type: none"> <li>• Building students' cognitive abilities on the importance of linear programming methods</li> <li>• Enabling students to use linear programming tools to find solutions to problems and make appropriate decisions</li> </ul>		
<b>9. Teaching and Learning Strategies</b>					
<ol style="list-style-type: none"> <li>1. Presenting the concepts, methods and areas of their application within the financial, banking and general reality.</li> <li>2. Brainstorming education strategy.</li> <li>3. Teaching strategy by adopting direct discussion in the classroom.</li> </ol>					
<b>4. Course Structure</b>					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	3	<ul style="list-style-type: none"> <li>• Adopting the discussion method by presenting some ideas</li> </ul>	Introduction to applying linear programming methods and types of models	In classrooms	Daily exams, direct discussion

2	3	<p>during the lecture so that it develops the student's ability to understand the topic directly.</p> <p>•Using applied examples that simulate the topics covered theoretically so that the student's knowledge picture is complete theoretically and practically.</p> <p>•Adopting the immediate examination method (written and analytical) to develop the spirit of competition among students.</p>	Formulation of linear programming	<p>questions and monthly exams</p>
3	3		Practical and analytical examples of linear programming formulation	
4	3		Introducing the types and methods of finding the optimal solution 1- Chart 2- Simplex method 3-Big-M method	
5	3		Finding the optimal solution using the graph method	
6	3		Finding the optimal solution using the simplex method	
7	3		Finding the optimal solution using the Big-M method	
8	3		Practical examples-with discussion	
9	3		Test the sensitivity of the optimal solution	
10	3		Testing the sensitivity of the optimal solution to changes in the energy available for the constraint	
11	3		Testing the sensitivity of the model by changing the parameters of the objective function	
12	3		Test the sensitivity of the solution by adding a new variable	
13	3		Applied examples - with discussion	
14	3		Applied examples - with discussion	
15	3		Final class exam	

#### 5. Course Evaluation

25 marks for the first month's exam, including (20) marks for the monthly exam and (5) marks for daily activities

25 marks for the second month's exam, including (20) marks for the monthly exam and (5) marks for daily activities.

Final pursuit score (50) marks

#### 6. Learning and Teaching Resources

<b>Operation Research introduction</b>	<b>Prof .Dr. Hamdy Taha – 8<sup>th</sup> Ed.</b>
<b>Model Building in Mathematical programming</b>	<b>H. Paul Williams – 5<sup>th</sup> Ed</b>
<b>Operations research concept and application</b>	<b>Hamed S. Noor Al-Shemerty</b>
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