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.

<h1 style="text-align:center">Academic Program Description Form</h1>

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: **Signature:**
Head of Department Name: **Scientific Associate Name:**
Prof. Dr. Bahaa abdul Razaq Kasiem   **Assis Prof. Dr. Ammar Yousif Dhicher**
Date: **Date:**

The file is checked by:
Department of Quality Assurance and University Performance
Director of the Quality Assurance and University Performance Department:
Date:
Signature:

<div style="text-align:right">

Approval of the Dean

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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	**Mathematical Statistics1 – Semester1**	3	97%	

* 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		**Mathematical Statistics1**	2	1

9. Expected learning outcomes of the program

knowledge

The course aims to familiarize the student with the basic concepts in mathematical statistics, including discrete and continuous random variables and their probability functions, as well as the student's knowledge of the most important discrete and continuous statistical distributions, the joint distribution function, the conditional distribution function, as well as the marginal function and the relationship between statistical distributions..

Skills

The ability to employ acquired mathematical statistics methods to analyze problems in all fields, which contributes to the development of society

Ethics

Developing the student's academic personality in the field of mathematical statistics 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

12. Faculty

Faculty Members

Academic Rank	Specialization		Special Requirements/Skills (if applicable)	Number of the teaching staff	
	General	Special	The ability to apply mathematical statistics methods in the cognitive field	Staff	Assistant Professor
Assistant Professor	Statistics	Applied Statistics		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

Introduction to mathematical statistics /dr. iden hassan, dr. hamza Ismael
Mathematical statistics /Robert Hogg

15.	Program Development Plan
Discussing mathematical statistics methods and trying to apply them practically in all fields	

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		Mathematical Statistics	Basic												

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

Course Description Form

1. Mathematical Statistics1
Definition of discrete and continuous random variables, random experiment, and probability functions
Types of probabilistic functions (discrete and continuous) and their most important characteristics
The most important discrete and continuous statistical distributions
Boundary, joint, and conditional functions

2. Course Code:

3. Semester / Year:
2023-2024

4. Description Preparation Date:
22-2-2024

5. Available Attendance Forms:
Semesters - Semesters 1

6. Number of Credit Hours (Total) / Number of Units (Total)
30 and 3 unite

7. Course administrator's name (mention all, if more than one name)
Name: ASS.Prof. Raissan A. Zalan Email: ressan.zalan@uobasrah.edu.iq

8. Course Objectives	
	• **Building students' cognitive abilities about the importance of mathematical statistics** • **• Enabling students to use mathematical statistics tools to solve societal problems**

9. Teaching and Learning Strategies

1. **Presenting the concepts, methods and areas of their application within the financial, banking and general reality.**
2. **Brainstorming education strategy.**
3. **Teaching strategy by adopting direct discussion in the classroom.**

4. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	3	Adopting the discussion method by presenting some	Definition of the continuous and discrete variables ,probability function	In classrooms	Daily exams, direct discussion questions and

2	3	ideas during the lecture so that it develops the student's ability to understand the topic directly. • Adopting the immediate examination method (written and analytical) to develop the spirit of competition among students	Discrete probabilities distribution (Bernoulli ,binomial)		monthly exams
3	3		Discrete probabilities distribution (Geometric ,Negative binomial		
4	3		Continuous probabilities distribution (Gamma , exponential,Chi square)		
5	3		Continuous probabilities distribution (Normal)		
6	3		Continuous probabilities distribution (pareto)		
7	3		Continuous probabilities distribution (Weibull)		
8	3		Discrete joint probability distribution and Continuous joint probability distribution		
9	3		Conditional probability distribution		
10	3		Some related topics with this type of joint p.d.f		
11	3		joint p.d.f of order statistics		
12	3		Marginal p.d.f of order statistics		
13	3		The p.d.f. of sample median		
14	3		The p.d.f. of sample range		
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

Introduction to mathematical statistics	**dr. iden hassan, dr. hamza Ismael**
Mathematical statistics	**Robert Hogg**