

**Academic program description form**

**University Name:** University of Basra

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

**Scientific Department:** Statistics Department

**Academic or Professional Program Name :** Bachelor of Statistics

**Final Certificate Name :** Bachelor of Science in Statistics

**Academic system:** courses

**Description Preparation Date:**

**File completion Date :** 2/26/2024

**Signature:**

**Head of Department Name :**

**Date:**

**Signature:**

**Scientific Associate Name:**

**Date:**

**The file is checked 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 seeks to be one of the leading higher education institutions at the University of Basra in the field of modern education and scientific research through its various scientific and research activities, as it prepares graduate students to work in government departments and benefit from specialization in the practical and applied field, as well as benefit from specialization in special fields.

### **2. Program mission**

Working to prepare and graduate leading scientific and leadership competencies in the field of statistical sciences and to develop the balance of knowledge in the field of scientific research in the field of statistical sciences to serve the local, regional and international community, as well as training and refining the minds of students scientifically and cognitively, and emphasizing social and cultural values and responding to the requirements of the local market.

### **3. Program objectives**

- Preparing and qualifying graduates specialized in statistical work to enable them to contribute to development programs in the government and private sectors.
- Enabling students to use the scientific method in determining the size and quality of the study sample and collecting and presenting data for the study.
- The ability to build indicators, download results, and test statistical hypotheses in various studies.
- The ability to use computers, information technology, and ready-made statistical programs
- Developing students' ability to devise and design scientific experiments and

present their results.

- Employing modern teaching methods, techniques and educational means in teaching statistical sciences.
- Preparing and qualifying students to pursue postgraduate studies by developing their intellectual, scientific and research skills.

#### 4. Program accreditation

There is none

#### 5. Other external influences

There is none

#### 6. Program structure

Program structure	Number of courses	Credit hours	Percentage	reviews
Institution requirements	45	3		
College requirements	Yes			
Department requirements	Yes			
Summer training	No			
Other	No			

❖ This can include notes whether the course is basic or optional

#### 7. Program description

Year/ level	Course code	Course name	Credit hours
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			<b>Theoretical</b>	<b>Practical</b>
		Economic measurement 1	<b>3</b>	

### 8. Expected learning outcomes of the program

#### Knowledge

- The ability to analyze data according to building an appropriate regression model
- Ability to find and test problems.
- The ability to address or reduce the problem.

#### Skills

- The ability to analyze data according to building an appropriate regression model
- Ability to find and test problems.
- The ability to address or reduce the problem.
- Enable the ability to analyze regression models.

#### Ethics

- Developing students' abilities to share ideas
- Defining the problem and the nature of the variables.
- Choose the appropriate method.

- Perform the correct steps for the solution. - Giving and analyzing results.	
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**9. Teaching and learning strategies**

- Explaining the scientific material to students in detail.
- Participation of students in the classroom in the topic
- Requesting reports on the relevant course topics and discussing them.

**10. Evaluation methods**

Quarterly and daily exams, class contributions, reports on course topics

**11. Faculty**

**Faculty members**

Academic rank	Specialization		Special requirements/skills if applicable)	Number of teaching staff		
	General	Special		Staff	Lecturer	
professor	Statistics	Applied Statistics			Yes	

**Professional development**

Mentoring new faculty members




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

### Course description form

<b>1. Course name</b>
Economic measurement 1
<b>2. Course code</b>
<b>3. Semester / year :</b>
2024-2023
<b>4. Description preparation date :</b>
2024\2\26
<b>5. Available attendance form :</b>
My class (lectures)

**6. Number of credit hours (total) / number of units (total)**

45

**7. Course administrator`s name ( mention all, if more than one name)**

Name : Prof. Sahera Hussein Zain

Email : sahera.zain@uobasrah.edu.iq

**8. Course objectives**

- Define standard problems
- Introducing the student to how to deal with problems and test them
- Learn how to address the standard model of standard problems
- How to extract all statistical indicators after eliminating standard problems

**9. Teaching and learning strategies**

- lecture
- - Classroom activities (subject reports and discussion)

**10. Course structure**

Week	hours	Required learning outcomes	Unit or subject name	Learning method	Evaluation method
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1	3	General linear regression	<ul style="list-style-type: none"> <li>- Multilinearity</li> <li>- Reasons for the existence of multicollinearity</li> </ul>	Lecture (theoretical and practical)	Examination, participation in the lecture, and submission of reports on the topic
2	3	General linear regression	<ul style="list-style-type: none"> <li>- Estimation in the case of the complete multicollinearity problem</li> <li>- Estimation in the presence of high multicollinearity (almost perfect)</li> </ul>	=	=
3	3	Defect in the analysis assumptions related to the description of the model	<ul style="list-style-type: none"> <li>- Contrast inflation factor</li> <li>- Detecting the presence of multicollinearity problem</li> <li>- Indicators of the presence of multicollinearity</li> </ul>	=	=
4	3	The assumption of homogeneity of variance for a random variable	<ul style="list-style-type: none"> <li>- Beaton_Glauber test</li> </ul>	=	=
5	3	The assumption of homogeneity of variance for a random variable	<ul style="list-style-type: none"> <li>-FarCleber test</li> </ul>	=	=
6	3	The assumption of homogeneity of variance for a random variable	<ul style="list-style-type: none"> <li>Methods of alleviating the severity of the problem</li> </ul>	=	=
7	3	The assumption of homogeneity of variance for a	Comprehensive examples	=	=

8	3	random variable	General Linear Hypothesis	=	=
9	3	Self-correlation	- Analysis of variance table using aggregates - Analysis of variance table using The coefficient of determination	=	=
10	3	Self-correlation	Statistical tests for segmented models	=	=
11	3	Detecting the autocorrelation problem	Diagnostic conditions	=	=
12	3	Detecting the autocorrelation problem	Estimation methods	=	=
13	3	Self-correlation	System of simultaneous equations	=	=
14	3	Self-correlation	Comprehensive examples	=	=
15	3	Comprehensive examples	Exam	=	=

### 11. Course evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation , daily oral , monthly or written exams, reports ....etc

### 12. Learning and teaching resources

Required textbooks (curricular books, if any)	Regression Analysis book written by Dr. Zahra Hassan Abbas and others
Main references (sources)	The book Advanced Econometrics (Theory and Practice), written by Amory Hadi Kazem Internet sources related to the article
Recommended books and references (scientific journals, reports	
Electronic references, website	