

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.

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## **Concepts and terminology:**

<u>Academic Program Description</u>: 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.

<u>Course Description</u>: 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.

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

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

**<u>Program Objectives</u>**: 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.

<u>Teaching and learning strategies</u>: 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: Al-Qadisiyah University Faculty/Institute: College of Administration and Economics Scientific Department: Department of Statistics Academic or Professional Program Name: BSc. in Statistics Final Certificate Name: Degree of BSc. in Statistics Academic System: Quarterly system Description Preparation Date: 18 / 3 / 2024 File Completion Date: 18 / 3 / 2024

at. Signature:

Signature: Head of Department Name: Assist. Prof. Dr. Bahr Kadhim Mohammed Date:

Signature: Scientific Associate Name: Assist. Prof. Dr. Latif Abdulridha Atiyah Date:

The file is checked by: Assist. Lect. Majid Fahem Jaafar Department of Quality Assurance and University Performance Director of the Quality Assurance and University Performance Department: Date:

Signature:

Approval of the Dean Prof. Dr. Hussein Falah Ward

### 1. Program Vision

The vision of the Statistics Department lies in trying to build a solid and distinguished qualitative statistical foundation whose outputs will be role models capable of building a country that stands among the ranks of advanced countries in terms of knowledge.

#### 2. **Program Mission**

Economic development for Iraq and achieving development by providing models of statistician graduates who possess the skills and ability to be creative in the field of collecting and analyzing data for various institutions in order to raise their efficiency.

#### 3. Program Objectives

The Bachelor of Science in Statistics program aims to achieve the following objectives:

1- Preparing and graduating specialized staff trained in modern and contemporary statistical methods (including computers and software) and qualified to use and apply these methods to work in statistical units in official departments and institutions and the private sector.

2- Qualification and training on the use of new tools to achieve access to information at the local and global levels.

3- Preparing curricula for topics and materials taught in the scientific departments of human and scientific institutes and colleges and for diploma, bachelor's, higher diploma, master's and doctoral degrees.

4- Developing postgraduate studies to serve the country's needs in all statistical fields and operations research.

5– Preparing highly qualified scientific frameworks through master's and doctoral programs to benefit from them in the field of teaching and research in universities

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#### and institutes.

6- Follow up on contemporary international and Arab developments in the field of statistics and operations research.

7– Effective contribution to preparing university professors in the specialty for the future.

8- Spreading statistical awareness in the country by holding statistical

conferences, contributing to the establishment of statistical training courses,

developing their curricula, and holding symposiums and seminars.

9- Providing consulting services in the field of specialization.

10- Continuous research by the department's members to prepare specialized statistical research and studies, with a focus on applied research that provides solutions to scientific problems, as well as writing and translating scientific and methodological books.

#### 4. **Program Accreditation**

Does the program have program accreditation? And from which agency?

No program accreditation

#### 5. Other external influences

Is there a sponsor for the program?

No sponsor for the program

6. Program Structure										
Program Structure	Number of Courses	Credit hours	Percentage	Reviews*						
Institution	7	19	14%	Basic courses						
College Requirements	3	6	4%	Basic courses						

Department Requirements	45	115	82%	Basic courses
Summer Training	1	pass	_	Basic courses
Other	-	-	-	

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

	7. Program Description								
Year/Level	Course Code	Course Name	C	Credit Hours					
			theoretical	practical					
First stage/first		Principles of statistics	4	-					
semester		Computer 1	1	2					
		human rights	1	-					
		Freedoms and democracy	1	_					
		Arabic Language	2	-					
		Calculus	3	-					
First stage/second		Principles of statistics 2	4	-					
semester		Integration	3	-					
		Management principles	2	-					
		Accounting principles	2	-					
		Computer 2	1	2					
		Principles of economics	2	-					
Second stage / first semester		Principles of probabilities	3	-					
		Sampling Techniques	3	-					
		The Matrices	3	-					
		Series and Sequences	3	-					
		Quality Control 1	2	-					
		Language program R 1	1	2					
		Economics Statistics 1	2	-					
Second stage / second semester		Probability distribution	3	-					
		Survey statistics	3	-					
		Linear algebra	3	-					
		Differential equation	3	-					

	Quality Control 2	2	-
	Language program R 2	1	2
	Economics Statistics 2	2	-
Third stage / first	biostatistics 1	2	_
semester	Numerical analysis1	3	_
	Regression1	3	-
	Linear programming	3	-
	Mathematical Statistics1	3	-
	English language	2	-
	Demographic analysis/1	2	-
	SPSS 1	3	-
Third stage / second	biostatistics2	2	-
semester	Numerical analysis2	3	-
	Regression2	3	-
	Mathematical Statistics2	2	-
	Demographic analysis/2	1	-
	SPSS 2	2	-
	Operations Research	2	-
Fourth stage / first	Inference 1	3	-
semester	Design experiments 1	3	-
	Econometrics 1	3	-
	Time series analysis 1	2	1
	Statistical applications 1	1	2
	Multivariate analysis 1	3	-
	Methods and ethics of scientific research	2	-
Fourth stage / second	Inference 2	3	-
Schlester	Design experiments 2	3	-
	Econometrics 2	3	-
	Time series analysis 2	2	1
	Statistical applications 2	1	2
	Multivariate analysis 2	3	-
	Graduation research project	2	-

8. Expected learning outcomes of the program	
Knowledge	
After graduating from the Department of Statistics, the student is expected to have the	
ability to:	
<ul> <li>Theoretical and applied analysis of the initial concepts acquired.</li> </ul>	
<ul> <li>Using mathematical concepts and methods in analysis.</li> </ul>	
<ul> <li>Applying the theoretical aspect to the problems he faces in his practical life.</li> </ul>	
<ul> <li>Familiarity with the principles and general rules of the specialty</li> </ul>	
<ul> <li>Making comparisons between the various theories he learned throughout his studies</li> </ul>	
and analyzing them.	
<ul> <li>Using modern statistical standards and programs in scientific research.</li> </ul>	
<ul> <li>Familiarity with broad and in-depth mathematical knowledge.</li> </ul>	
Skills	
1 – Understanding and analyzing statistical theories and their methods to address the	
problems facing different sectors	
2 - Enabling them to use statistical programs to collect, classify, tabulate and analyze	
data	
3- Enabling them to make future predictions of phenomena	
Ethics	
1-Using the student's acquired skills to consolidate values in practical life	
2- Adapting the knowledge acquired by the student in the service of society	
3- Enhancing the country's service situation through optimal use of data and its analysis	

## 9. Teaching and Learning Strategies

The department used a set of strategies and methods used in the teaching and

learning process, which are:

- 1- Brainstorming strategy
  - 2- Discussion strategy
  - 3- E-learning strategy
- 4- Teaching strategy with examples

#### 10. Evaluation methods

The student is evaluated through a set of procedures:

- 1. Evaluating the student by involving him in giving lectures
  - 2. Mini discussion sessions
  - 3. Participate in discussion and dialogue
    - 4. Conduct daily and quarterly tests

	11. Faculty								
	Faculty Members								
Academic Rank	Specialization		Speci Requiremen (if applic	al its/Skills able)	Number of the teachir				
	General	Special			Staff	Lecturer			
Professor	0	6			6	0			
Assistant professor	0	5			5	0			
Lecturer	3	1			4	0			
Assistant lecturer	6	5			11	0			

#### **Professional Development**

#### Mentoring new faculty members

New faculty members are enrolled in a one-month teaching methods course for the purpose of learning how to manage a classroom. The new teaching member is then involved in practical subjects with another experienced teaching member for the purpose of gaining skills and preparing him in the future to teach specialized theoretical subjects.

#### Professional development of faculty members

Faculty members are followed up by the department head to learn how to manage the class and introduce modern technologies in teaching, such as the electronic whiteboard. In addition, an annual performance evaluation (out of 100%) is conducted for each teacher by the department head for the purpose of improving the positives and avoiding the negatives that accompanied the

educational process during the academic year. The faculty member is informed of the performance evaluation score at the end of each year. The department head also follows up on the academic development of the faculty member by following up on the publication of their scientific research in accredited and peer-reviewed scientific journals.

12. Acceptance Criterion

The criterion for accepting a student into the Statistics Department is through the following channels:

1– Central admission that comes from the Iraqi Ministry of Higher Education and Scientific Research.

2- Channels outside the admission plan, such as private government education channels and martyrs' channels.

13. The most important sources of information about the program

Sources of information about the bachelor's program are provided through a number of channels, the most important of which are:

1– The official website of the College of Administration and Economics at Al– Qadisiyah University.

2- The introductory brochure issued by the college every academic year.

3- Graduates who completed their studies in the department and joined various state institutions.

14. Program Development Plan

The Statistics Department holds multiple meetings annually, the purpose of which is to discuss and develop the reality of the department, the progress of the educational process, the most prominent challenges and problems facing it, develop plans to solve them, and the most prominent advantages and successes of the department for attribution. In addition, the Statistics Department develops an annual scientific plan that includes planned research for teaching staff and the distribution of courses for all stages. A group of committees is formed with multiple tasks, such as (the Scientific Committee, which follows up on all scientific matters of the department during the academic year, the Postgraduate Studies Committee, whose mission is to follow up on the progress of the educational process for postgraduate studies, the Inquiry Committee, the Educational Guidance Committee, and other important committees).

			Pre	ogram	Skills	outl	ine								
				Required program Learning outcomes											
Year/Level	Course Code	rse Course Basic de Name			Knowledge			Skills			Ethics				
			optional	A1	A2	A3	A4	B1	B2	<b>B3</b>	<b>B4</b>	C1	C2	С3	C4
First stage/first		Principles of statistics	Basic												
somostor		Computer 1	Basic												
semester		human rights	Basic												
		Freedoms and democracy	Basic												
		Arabic Language	Basic												
		Calculus	Basic												
First stage/second		Principles of statistics 2	Basic												
semester		Integration	Basic												
Jonicotor		Management principles	Basic												
		Accounting principles	Basic												
		Computer 2	Basic												
		Principles of	Basic												

		economics							
Second stage / first semester		Principles of probabilities	Basic						
		Sampling Techniques	Basic						
		The Matrices	Basic						
		Series and Sequences	Basic						
	(	Quality Control 1	Basic						
		Language program R 1	Basic						
		Economics Statistics 1	Basic						
Second stage / second semester		Probability distribution	Basic						
		Survey statistics	Basic						
		Linear algebra	Basic						
		Differential equation	Basic						
		Quality Control 2	Basic						
		Language program R 2	Basic						

	Economics Statistics 2	Basic						
Third stage / first semester	biostatistics 1	Basic						
	Numerical analysis1	Basic						
	Regression1	Basic						
	Linear programming	Basic						
	Mathematical Statistics1	Basic						
	English language	Basic						
	Demographic analysis/1	Basic						
	SPSS 1	Basic						
Third stage / second semester	biostatistics2	Basic						
	Numerical analysis2	Basic						
	Regression2	Basic						
	Mathematical Statistics2	Basic						

	Demographic analysis/2	Basic						
	SPSS 2	Basic						
	Operations Research	Basic						
Fourth stage / first semester	Inference 1	Basic						
	Design experiments 1	Basic						
	Econometrics 1	Basic						
	Time series analysis 1	Basic						
	Statistical applications 1	Basic						
	Multivariate analysis 1	Basic						
	Methods and ethics of scientific research	Basic						
Fourth stage / second semester	Inference 2	Basic						
	Design experiments 2	Basic						

Econometrics 2	Basic						
Time series analysis 2	Basic						
Statistical applications 2	Basic						
Multivariate analysis 2	Basic						
Graduation research project	Basic						

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

First stage

# **Course Description Form**

		1. Course Name:							
		Computer							
		2. Course Code:							
		3. Semester / Year:							
		First semester of the year 2023-2024							
	4. Description Preparation Date:								
	20/4/2024								
	5. Available Attendance Forms:								
	-Classrooms, In-person study hall								
	- Computer laboratories								
	6. Number of Credit Hours (Total) / Number of Units (Total)								
		/30/ <b>units2</b>							
7.	Course a	dministrator's name (mention all, if more than one name)							
		Name: Assistant teacher: Sanaa Jabbar Tohme							
		Email: SANAA.J.TUAMA@qu.edu.iq							
		8. Course Objectives							
Course (	Objectives	-Enabling the student to know the electronic calculator and the objectives o							
		studying it. And use the basic programs that the student needs							
		-How to deal with the electronic calculator, manage files, and enter							
	texts Coordinate, store and display them								
		-Factors affecting computer performance							
		9. Teaching and Learning Strategies							
Strategy		<ul> <li>The student gains experience and knowledge about the</li> </ul>							
		electronic calculator. Encouraging correct answers and							
		allocating a percentage of the grade to group activities.							
	• Ac	ctive participation between professor and student in managing							

	the lecture. • Training the student in laboratories to use the electronic calculator.							
			10.Course Structure					
Week	Hours	Required Learning	Unit or subject name	Learning	Evaluation			
		Outcomes		method	method			
1	2	The student gains experience and knowledge about t electronic calculato Gain knowledge about software an its operation.	A general introducti to: - The concept of t electronic calculator Information technology - Types computers -Input ar output devices - Typ of storage media- Factors affecting computer performance Software concept - operating systems ready-made application softwar	Theoretica Displayed by a data show devic theoretica Theoretica Displayed by data show	Discussic and question Class assignments			
3	2	Gain knowledge about the main interfaces of softwa	The concept of windows - graphica interfaces-the importance of The Windows operating system - t desktop – basic windows and bars.	Theoretica Displayed by a data show devic	Discussion and questions			
4	2	Organizing files inside the compute	Organize, save, move and delete files and folders.	My work i: in laboratorie	Practical duty			

5		Knowledge of	Control nanel and	My work i	Discussion			
5	2	computer parts	file and	in laboratori	and questions			
	-	computer pures	program manageme	in labor acor	und question.			
6			the first exam					
7		The student acquir	Microsoft Word -	Theoretica	Class			
	2	knowledge about	Introduction to the	Displayed by	assignments			
		Microsoft Word.	program, its	data show	0			
			importance, and	device				
			learning about the					
			main interfaces					
8		Window control	Control windows, ba	My work is	Discussion an			
			and tabs for program	laboratorie	questions			
9		Word processing	Entering and	Theoretica	Class			
			formatting texts.	Displayed by	assignments			
				data show				
				device				
10		Insert and merge	Inserting, merging	Theoretica	Daily exam			
		paragraphs	and dividing	Displayed by				
			paragraphs and	data show				
			preparing Arabic	device				
11			and Latin paragraph		<b>D</b>			
11		Open and close	Delete file,	My work is	Practical duty			
		Files	open stored	laboratorie				
			file and					
			lile, allu					
12		Incort tables	Inserting processing	Theoretica	Class			
12		msert tables	and formatting table	Displayed h	assignments			
			and for matting table	data show	assignments			
				device				
13		Page formatting	Formatting pages	My work is	discussion			
			frames, and margin	laboratorie				
14		Insert pictures an	Insert charts, pictur	Theoretica	Class			
		shapes	shapes and equation	Displayed	assignments			
		*		by a data she	5			
				device				
15		/	Second exam					
	10. Course Evaluation							

<ul> <li>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</li> <li>The type of assignment for the student and the grade awarded to him</li> <li>Practical and theoretical assignments, daily exams, and student participation in discussions and applications( 10) <ul> <li>the first exam( 15)</li> <li>Second exam (15)</li> <li>final exam (60)</li> </ul> </li> </ul>					
• Total score(100)					
11. Learning and	d Teaching Resources				
Required textbooks (curricular books, if any)	1. The methodological book prescribed by t Ministry of Higher Education and Scientifi Research				
Main references (sources)	<ol> <li>1- Rifai, Muhammad, "Information Technology (IT)", PDF</li> <li>2- Al-Halaibeh, Dz Ziad, Suleiman, "Cambridge International Book in Information Technology Word 2014 Processing-4", PDF.</li> <li>3- Ali, Osama, "Word 2016 Learning Book PDF</li> </ol>				
Recommended books and references (scientific	/				
journals, reports)					
Electronic References, Websites	<ul> <li>Al-Zoubi, Dr. Muhammad Bilal, Al-Sharay Dr. Ahmed, "Computer and ready-made software basic skills."</li> <li>-Al-Zoghbi, Muhammad Bilal, "Computer an Internet Principles IC3"</li> </ul>				

	Course Name: •							
	English language							
	Course Code: •							
	Semester / Year: •							
	(Spring) Second 2023-2024							
Description Preparation Date: •								
	Tuesday, 19 March 2012							
	Available Attendance Forms: •							
	Classroom							
Number	of Credit Hours (Total) / Number of Units • (Total)							
	30							
Course	e administrator's name (mention all, if • more than one name)							
	Name: Huda Hamid Hadi							
	Email: alkinanihuda26@gmail.com							
	Course Objectives •							
Course								
Objective	1. Identification of different itimes English							
	language rules							
	2. Identification of questioning tools.							
	3. Recognizing and addressing unanswered							
	questions.							

		4. Recognition of sounds in English.					
	5. Use of external and public segments for development of reading and writing.						
	Т	eaching	and Learning St	rategies ·			
Stra	ateg	<ul> <li>1. Interactive skills: Having the ability to communicate with the subject teacher an colleagues.</li> <li>2. Diagnostic skills: The possibility of speaking, listening, and speaking in Englis</li> <li>3- Analytic skills: The possibility of translating texts from English into Arabic vice versa.</li> <li>To stimulate understanding of the involvement in the material by offering so examples from the methodological book outside the planned book. (Methods of assessment)</li> <li>The student's involvement in the preparat and explanation of the material.</li> <li>Asking some outside questions about th subject.</li> <li>Discussion of some subjects in English</li> </ul>					
		- Daily exams.					
		(	Course Structure	÷ •			
We	Hour	Requir	Unit or	Learning	Evaluation		

ek	s	ed	subject name	method	method
		Learni			
		ng			
		Outco			
		mes			
		Gain	-Hello	Lootu	Que
		knowle	-	Leciu	s a
		e from t	is,are,am,my,y	n	discl
		cours	r	dialog	1
			-Numbers	and	
				interro	
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		e from t	- countries		
		cours	he,she,they,h	l t -	
			her	Lectu	
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			ion	data	
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		e from t			r
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			-nas,nave	rd	
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					F
		Gain			
		knowle			
		e from t	-present simp	_	
		cours	tense	Data	
			-sports	blackt	vue:
			-Numbers,pric	rd	s a disci
			· •		

	vorh nattran		r
	verb pattiell		1
Gain knowle e from t cours	-present simp tense -the time	Data blackb rd	Que s a discu r
Gain knowle e from t cours	-Question word -Adjectives	Data blackb rd	Que: s a discu r
Gain knowle e from t cours		Lectu discus n, dialog ano	Que: s a discu r
Gain knowle e from t cours	- preposition	interro ion, usin data the blackt rd	Que: s a discu r
Gain knowle e from t cours	past simple tense -was,were	Data blackt rd	Da exa
Gain	-past simple tense	Data blackb rd	

Que: s a discu		Questions,neg ives	knowle e from t cours	
	Data blackt rd			
Hom ł		- Adjective,nou - adverbs	Gain knowle e from t cours	
l C	Data blackb rd			
Que s a discu r		-some, any	Gain knowle e from t cours	
C	Data blackb rd			
Que: s a discu r		-present continuous ten -colours	Gain knowle e from t cours	
C	Data blackt rd			
		- future tens -Social expressions -	Gain knowle e from t cours	
1	Lectu discus n,			

			-			
			Bo	ook reviev	dialog and interro ion usin data the blackt rd Data blackt rd	
		С	ourse	e Evaluatio	n •	
Distr to t	ributing he stude	the score ent such a wri	e out o is daily tten e	of 100 accor y preparatio xams, repor	ding to the tas on, daily oral, 1 rts etc	ks assigned nonthly, or
	L	earning	and T	eaching R	Resources •	
Req	uired te	xtbooks (a	curricu		new head	way plus
	books, if any)					
M	ain refer	ences (so	ources			
Recommended books and		https://www.scribd.com/docum 510746145/New-Headway-Pl		<u>.com/docume</u> Headway-Plu		
references (scientific				Beginner-Stu	dent-s-book	
journals, reports)						
	Electron	ic Referer	nces,			
	W	/ebsites				

# **Course Description Form**

1. Course Name:				
Principles of Accounting				
2. Course Code:				
3. Semester / Year:				
Semester 2/ 2024				
4. Description Preparation Date:				
24/3/2024				
5. Available Attendance Forms:				
Physical				
6. Number of Credit Hours (Total) / Number of Units				
(Total)				
30 hu				
<ol><li>Course administrator's name (mention all, if</li></ol>				
more than one name)				
Name: Noha Ada				
Email: noha ada@qu.edu.iq				
8. Course Objectives				
Course Objective  • Introducing the student to the basics and				
concepts of accounting/accounting				
principles/accounting assumptions.				
Enable the student to register in the journal				
record (double entry).				
Enable the student to post to the ledger rece				
and balance accounts.				
Defining and enabling the student to prepa				
the trial balance.				
<ul> <li>Defining and enabling the student to capit operations (capital formation).</li> </ul>				
<ul> <li>Defining and enabling the student to account</li> </ul>				
the merchandise or merchandise inventor				
9. Teaching and Learning Strategies				

	Strategy	y 1-	1- Introducing the student to the mechanism of				
		ac	counting registration	and accour	nting records a		
			completing the accounting course				
		2-	2- Einancial statements (income hudget) and the				
		-	machanism f	or proporing	thom		
			mechanism	or preparing	, them.		
3- Preparing closing restrictions at the end of the							
10. Course Structure							
Wee	Hour	Required	Unit or subject	Learnin	Evaluatio		
k	s	Learning	name	g	n method		
		Outcome		method			
		s					
1	2	A-3	Accounting basics	lecture	Oral		
-	-		and concepts	1000010	questions		
			1		and speed		
					tests		
2	2	A-3	Accounting	lecture +	Oral		
			principles/accounti	exercises	questions		
			ng assumptions.		and speed		
3	2	Λ 3	Journal log (double	loctura	Oral		
5	2	A-3	entry)	exercises	questions		
			entry).	excretises	and speed		
					tests		
4	2	A-4	Solve other	lecture +	Oral		
			examples of	exercises	questions		
			accounting entries.		and speed		
					tests		
5	2	A-3	Transfer to the	lecture +	Oral		
			ledger record.	exercises	questions		
				Ofai	tests		
6	2	A-3	Other examples of	lecture +	Oral		
	_		posting to the	exercises	questions		
			ledger record		and speed		
					tests		
7	2	A-3	Balance accounts.	lecture +	Oral		
				exercises	questions		
					and speed		
8	2	Δ 3	Prenara trial	Writton	Oral		
0	۷	A-3	halance	exams	questions		
			Julanee	exuilio	and speed		
					tests		
9	2	A-3	The first test.	lecture +	Oral		
				exercises	questions		
					and speed		
<u> </u>					tests		
10	2	A-3	Other examples of	lecture +	Oral		
			preparing a trial	exercises	questions		

			balance	e		and speed
						tests
11	2	A-3	Capital Oper	ations	lecture +	Oral
			Create the op	bening	exercises	questions
			entry			and speed
10	2		0.1	1 6	1 .	tests
12	2	A-4	Other examp	oles of	lecture +	Oral
			capital opera	ations	exercises	questions
			and opening	entry		and speed
12	2	A 2		l.	la atuma i	Oral
15	Z	A-3	Accounting	g IOF athods	ecture +	Oral
			goods and m	ing	exercises	questions
			goods	mg		tests
14	2	Δ_1	goods		lecture +	Oral
17	2	<b>M</b> - <b>H</b>	treatments for		exercises	questions
			merchandise		CACICISCS	and speed
			operations			tests
15	2		The second	The second test		Oral
10	-		110 500010		exams	questions
						and speed
						tests
		11		aluati	00	
		11.	Course Ev	aluali	on	
Distri	buting t	he score out	of 100 acco	ording	to the task	s assigned
to the	e studen	t such as da	ilv preparat	ion. di	ailv oral, m	onthly, or
	o occación	writton	ovame ron	orte	otc	, on one of the second s
		witten	exams, repo	5115	ell	
	12	. Learning	g and Tead	ching	Resource	S
Requ	uired text	tbooks (curri	cular books,	Pri	nciples of Aco	counting Foua
		anv)	<i>L</i> ако	u and Miqda	a Anmea Al-Ja	
Main references (sources)						
Recon	Recommended books and references					
(Se	cientific j	journals, rep	orts…)			
E	lectronic	References				

(1) Course Name:
General Arabic language for non-specialized departments
(2) Course Code:
(3) Semester / Year
2024 - 2023

(4) Description Preparation Date:							
2024\3\19							
(5) Available Attendance Forms:							
		Officia	al wo	rking hours			
(6)	Number of	Credit Hours	(Tota	l) / Number of Uni	ts (Total)		
			30n	ours			
(7)Cours	e administ	rator's name	(mer	ntion all, if more t	han one r	ame)	
Doctor teacher: ALI ABID MUSLIM HASHIM <u>ali.alfahhm@qu.edu.iq</u> Emil							
		(8) Cour	se Ot	ojectives			
	1- P	roviding the stude	nt with	linguistic skill			
2	2- Developing	students' linguisti	c and r	hetorical abilities			
3-	Enabling stude	ents to write correct	to dow	e of spelling errors			
4 introducing student	(9	) Teaching and	d Lea	rning Strategies			
1. T	The strategy	/ · · · · · · · · · · · · · · · · · · ·					
2. The teach	hing strates	gy varies					
accord	ding to stud	lents'					
understanding:							
3. 1- The stand	dard metho	od is to give					
the rule fir	st, then the	examples					
shov	wn for this	hall.					
	4.						
5. 2- The induc	ctive metho	od: Students					
are given examples first, then the							
rule is deduc	ced from th	e examples.					
		10.C	ourse	Structure			
Evaluatio n method	Learning method	Unit or subjec name		Required Learning Outcomes	Hours	Week	
			30 -	Outcomes	<u>                                     </u>		

General questions and discussio n	theoretica l	Rules for drawing hamza	Teaching students how to draw hamza	2	The first
General questions and discussio n or exam	theoretica l	Rules for drawing hamza	Teaching students how to draw hamza	2	The second
General questions and discussio n	theoretica l	Rules for drawing hamza	Teaching students how to draw hamza	2	The third
Exam	theoretica l	Punctuation marks	Teaching students how to place punctuation marks	2	The fourth
General questions and discussio n or exam	theoretica l	Punctuation marks	Teaching students how to place punctuation marks	2	fifth
General questions and discussio n	theoretica l	Analysis of ancient poetic text	Teaching students how to analyze ancient poetic text	2	sixth
General questions	theoretica l	Analysis of ancient poetic text	Teaching students how to analyze ancient poetic text	2	seventh
Group assignment s	theoretica l	Analysis of modern poetic text	Teaching students how to analyze modern poetic text	2	eighth
General	theoretica	The beginning	Teaching	2	ninth

questions	1	and its	students the		
		reversals	rules of		
			initiation and		
			its reversals		
			Teaching		
Monthly	theoretica	The beginning and its reversals	students the		
ovam	theoretica		rules of	2	the ten
Exam	1		initiation and		
			its reversals		
			Teaching		
Comoral	theory	Number and its	students the		
General	theoretica	Number and its	rules and	2	Eleven
questions	1	provisions	provisions of		
			numbers		
			Teaching		
discussio	cussio and xam theoretica		students the		
n and		Number and its	rules and	2	twelve
exam		provisions	provisions of	_	
CAdin			numbers		
			Teaching		1
	theoretica l	The actor and his deputy	students the	2	
General			rules of the		thirteent
questions			active and	-	
			nassive		
			Teaching		
	theoretica	Original and secondary	students the		
Group			rules of original		
assignme			and subsidiary	2	Fourte
nts	1	parsing marks	grammatical		
			signs		
			Teaching		
	scussio theoretica Ori	Original and	students the		
discussio		secondary	rules of original	2	fifteen
n	1	narcing marks	and subsidiary	2	mueen
		parsing marks	anu subsidial y		
		11 0	grammatical		
		11-Course E	valuation		
1. Course evaluation					
2. IIIC E		the course grade	is divided as follows.		e student, i

3. 1- Ten marks for a number of activities: commitment to daily preparation,						
participation and activity in th	e classroom, preparation of reports, and daily					
	examinations.					
4. 2-15 marks	s for the first month's exam.					
5. 3- 15 marks	for the second month exam.					
6. 4-60	marks for final exam.					
12- Learning and	Teaching Resources					
General Arabic for non-specialized	Required textbooks (curricular books, if any)					
departments / Rashid Al-Obaidi and other						
The book of clear dictations written by	Main references (sources)					
Ali Al-Jarim and Ahmed Amin						
Adequate grammar, Abbas Hassan						
Explanation of Ibn Aqeel, explaining the	Recommended books and references (scientific					
paths to Alfiyyah by Ibn Malik, Al-Mawrid	iournals, reports(					
magazines and other magazines concerne	J ,					
with language and literature						
Al-Fasih Network, Sciences of the Arabic	Electronic References, Websites					
Language						

# **Course Description Form**

13. Course Name: Differentiation							
14. (	Course Code:						
15. Semester	/ Year: 1/ 2023-2024						
16. Description Pre	eparation Date:19-03-2024						
17.Available Attendar	nce Forms: study hall						
18.Number of Credit Hours (Tota	al) / Number of Units (Total) 45/3						
19.Course administrator's name (n	nention all, if more than one name)						
Name: Dr.	Qusuay Alqifiary						
Email: <u>qusuay</u>	<u>alqifiary@qu.edu.iq</u>						
20. Course Objectives							
Course Objectives	Identify the basic concepts of						
	differential calculus.						
	and its relationship to limits.						
	Identify the differentiability of						
	functions and its relationship to						
	Knowledge of differential applications						
	in various sciences.						
	<ul> <li>The ability to use differentiation to solve mathematical problems.</li> </ul>						

21. Teaching and Learning Strategies							
<ul> <li>Strategy <ul> <li>Manage the lecture in a way that makes feel important of time.</li> <li>Encouraging correct answers and discussing wrong answers instead of relying on punishment for them.</li> <li>Assigning students and group assignments.</li> <li>Allocate a percentage of the grade to group activities.</li> <li>Use a method specific to this course.</li> </ul> </li> <li>Commitment to the deadline for Submitting exersices and reports.</li> </ul>							
		22.	Course Structu	ıre			
Week	Hours	Required Learning	Unit or subject	Learning method	Evaluation		
		Outcomes	name		method		
1st	3	Acquiring experience and knowledge in arithmetic operations on real numbers	Real numbers and their properties, arithmetic operations.	<ul> <li>Managing the lecture in a way that emphasises the importance of time.</li> <li>Encouraging correct answers and discussing incorrect answers instead of punishing them.</li> </ul>	• Clas s assi gnm ents		
2st	3	Acquiring experience and knowledge in arithmetic operations on real numbers	Real numbers and their properties, arithmetic operations.	<ul> <li>Assigning students certain group activities and assignments.</li> <li>Allocating a percentage of the grade for group activities</li> </ul>	• Clas s assi gnm ents		
3st	3	<ul> <li>Acquiring experience and knowledge in drawing</li> </ul>	Definition of a function, domain and	<ul> <li>Assigning students various group activities and assignments.</li> </ul>	• daily task s		
Γ	1		1				
-----	---	-------------------------------	-----------------	---	-----------		
		mathematical functions	co-domain,	Adhering to the			
			range of the	submitting			
			function,	assignments and			
			operations on	research			
			functions,				
			composition of				
			functions,				
			graphing				
			functions, and				
			the quick				
			method.				
4st	3	Acquiring	Definition of a	Using a suitable	• daily		
		experience and knowledge in	function,	to this course.	exa ms		
		drawing	domain and	• Active			
		functions	co-domain,	participation in the classroom is evidence of the			
		i anctions	range of the				
			function,	student's			
			operations on	commitment and responsibility			
			functions,				
			composition of				
			functions,				
			graphing				
			functions, and				
			the quick				
			method.				
5st	3	Acquiring	Limits and	Managing the	• daily		
		expertise and knowledge in	Continuity:	lecture in a way that emphasises	task s		
		calculating the	(Definition of	the importance	5		
		limits and	Limits and	of time.			
		mathematical	related	Encouraging     correct answers			
		functions.	theories),	and discussing			
			Continuity and	incorrect answers			
			its theories	insteau or			
	I		l				

				punishing them.	
6st	3	Acquiring expertise and knowledge in calculating the limits and continuity of mathematical functions.	Limits and Continuity: (Definition of Limits and related theories), Continuity and its theories	<ul> <li>Using a suitable method relevant to this course.</li> <li>Active participation in the classroom is evidence of the student's commitment and responsibility</li> </ul>	• daily exa ms
7st	3	Acquiring knowledge about the concept of derivatives, how to find them, and their relationship to continuity.	Derivatives (Definition and Related Theories), the Relationship between Differentiation and Continuity	<ul> <li>Managing the lecture in a way that emphasises the importance of time.</li> <li>Encouraging correct answers and discussing incorrect answers instead of punishing them.</li> </ul>	daily tasks
8st	3	Acquiring knowledge about the concept of derivatives, how to find them, and their relationship to continuity.	Derivatives (Definition and Related Theories), the Relationship between Differentiation and Continuity	<ul> <li>Using a suitable method relevant to this course.</li> <li>Active participation in the classroom is evidence of the student's commitment and responsibility</li> </ul>	daily exams
9st		Identifying the main theorems in calculus.	Rolle's Theorem (text, proof with	<ul> <li>Using a suitable method relevant to this course.</li> <li>Active participation in</li> </ul>	daily tasks

10st	3	Identifying the main theorems in calculus.	examples), Mean Value Theorem (text, proof, examples). Rolle's Theorem (text, proof with examples), Mean Value Theorem (text, proof, examples).	the classroom is evidence of the student's commitment and responsibility • Managing the lecture in a way that emphasises the importance of time. • Encouraging correct answers and discussing incorrect answers instead of punishing them.	daily exams
11st	3	Studying Some Applications of Derivatives	Derivatives Applications	<ul> <li>Using a suitable method relevant to this course.</li> <li>Active participation in the classroom is evidence of the student's commitment and responsibility</li> </ul>	daily tasks
12st	3	Studying Some Applications of Derivatives	Derivatives Applications	<ul> <li>Managing the lecture in a way that emphasises the importance of time.</li> <li>Encouraging correct answers and discussing incorrect answers instead of punishing them.</li> </ul>	daily exams

13st	3	Understandi concept of p derivatives and them.	concept of partial derivatives and finding them.		•	Using a suitable method relevant to this course. • Active participation in the classroom is evidence of the student's commitment and responsibility	daily tasks	
14st	3	Unders the cor pa derivat findin	standing ncept of rtial ives and g them.	Partial Derivatives		•	Managing the lecture in a way that emphasises the importance of time. Encouraging correct answers and discussing incorrect answers instead of punishing them.	daily exams
15st	3	Studying S Application Derivativ	Some ns of ves	Deriv Applic	ative ations	•	Using a suitable method relevant to this course. • Active participation in the classroom is evidence of the student's commitment and responsibility	Class assignment s
			С	ourse Ev	aluation			
Module Evaluation								
		Week	Wight	/Mark	Time/	'no.	As	
) #1, #2 and #10, #11 5 and 10 10%		5 and 10	10%	(10)	2		Exams	

I	O #3, #4 and #6, #7	2 and 12	10% (10)	2	Assignments	
	AllContinuous0% (0)		0	Projects		
	LO #5, #8 and #10	13	0% (0)	0	Report	
	LO #1 - #7	7,12	20% (20)	1hr	Exam mid-course	
	All 16 60% (60)		60% (60)	3hr	Final exam	
			100% (100 Marks)		Total assessment	
			Learning and Tea	ching Resource	s	
	Required textboo	vks (curricula	r books, if any)	1- Thoma	s. G. B., Calculus Geomatry, 4th , 1	and Analytic 1984.
	Main re	ferences (sou	urces)	Durfee. W.H, C	alculus and Analy New York, 1971.	tic Geometric,
	Recommende	ed books and	references			
	(scientific	; journals, re	ports…)			
	Electronic	References,	Websites	www. F	reescience.info	o/math

## **Course Description Form**

23. Course Name: Integration
24. Course Code:
25. Semester / Year: 2/ 2023-2024
26. Description Preparation Date:19-03-2024
27.Available Attendance Forms: study hall

	28.	Number of Credit Ho	urs (Total) / Nu	mber of Units (Total)	45/3	
	<b>29.</b> C	ourse administrator's Na Email:	name (mention me: Dr. Qusuay qusuay.alqifia	all, if more than one y Alqifiary ary@qu.edu.iq	name)	
		30.	Course Obj	ectives		
Course Objectives• Understanding the fundamental concepts of integration. • Recognising the integrability of functions and its relation to continuity.• Knowing the applications of integration in various sciences.• Ability to use integration in solving mathematical problems.						
				integration in a	reas.	
31. Teaching and Learning Strategies         Strategy       • Managing the lecture in a way that emphasises the importance of time.         • Encouraging correct answers and discussing wrong answers instead of solely relying on punishment.         • Assigning students to some group activities and assignments.         • Allocating a percentage of the grade for group activities.         • Using an appropriate method tailored to this course.         • Active participation in the classroom is evidence of the student's commitment and responsibility.         • Adhering to deadlines for submitting assignments and research. Tests, whether periodic, mid-term, or final, reflect commitment, knowledge acquisition, and skills.						
32. Course Structure						
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method	
1st     3     • Gain experience and knowledge in integration and calculating     Defin definitegration its get		Definition of definite integration and its geometric	Managing the lecture in a way that emphasises the importance	Class assig nmen		

				I	
		areas	interpretation, examples, applications (area calculation).	of time. • Encouraging correct answers and discussing incorrect answers instead of punishing them.	ts
2st	3	Gain experience and knowledge in integration and calculating areas	Definition of definite integration and its geometric interpretation, examples, applications (area calculation).	<ul> <li>Assigning students certain group activities and assignments.</li> <li>Allocating a percentage of the grade for group activities</li> </ul>	<ul> <li>Class assig nmen ts</li> </ul>
3st	3	Gain experience and knowledge in calculating integrals	Definition of indefinite integration and its relationship to the derivative (integrating functions whose derivatives exist).	<ul> <li>Assigning students various group activities and assignments.</li> <li>Adhering to the deadline for submitting assignments and research</li> </ul>	• daily tasks
4st	3	Gain experience and knowledge in calculating integrals	Definition of indefinite integration and its relationship to the derivative (integrating functions whose derivatives exist).	<ul> <li>Using a suitable method relevant to this course.</li> <li>Active participation in the classroom is evidence of the student's commitment and responsibility</li> </ul>	• daily exam s

5st	3	Gain experience and knowledge in calculating the limits and continuity of transcendental functions	Monotonic Functions: Their limits / Derivatives	<ul> <li>Managing the lecture in a way that emphasises the importance of time.</li> <li>Encouraging correct answers and discussing incorrect answers instead of punishing them.</li> </ul>	• daily tasks
6st	3	Gain experience and knowledge in calculating the limits and continuity of transcendental functions	Monotonic Functions: Their limits / Derivatives	<ul> <li>Using a suitable method relevant to this course.</li> <li>Active participation in the classroom is evidence of the student's commitment and responsibility</li> </ul>	• daily exam s
7st	3	Gaining knowledge about the concept of the derivative, how to find it, and its relationship to continuity	Monotonic Functions: Their limits / Derivatives	<ul> <li>Managing the lecture in a way that emphasises the importance of time.</li> <li>Encouraging correct answers and discussing incorrect answers instead of punishing them.</li> </ul>	daily tasks
8st	3	Gaining knowledge about the concept of the derivative, how to	Monotonic Functions: Their limits /	• Using a suitable method relevant to this course.	daily exams

		find it, and its relationship to continuity	Derivatives	• Active participation in the classroom is evidence of the student's commitment and responsibility	
9st		Gain knowledge about integration methods	Basic laws in integration, integration by parts.	<ul> <li>Using a suitable method relevant to this course.</li> <li>Active participation in the classroom is evidence of the student's commitment and responsibility</li> </ul>	daily tasks
10st	3	Gain knowledge about integration methods	Basic laws in integration, integration by parts.	<ul> <li>Managing the lecture in a way that emphasises the importance of time.</li> <li>Encouraging correct answers and discussing incorrect answers instead of punishing them.</li> </ul>	daily exams
11st	3	Knowing ways to find integration	Integration by trigonometric substitutions	<ul> <li>Using a suitable method relevant to this course.</li> <li>Active participation in the classroom is evidence of the student's</li> </ul>	daily tasks

				commitment and responsibility	
12st	3	Knowing ways to find integration	Integration by trigonometric substitutions	<ul> <li>Managing the lecture in a way that emphasises the importance of time.</li> <li>Encouraging correct answers and discussing incorrect answers instead of punishing them.</li> </ul>	daily exams
13st	3	Recognize the concept of partial fractions and use it by integration	Integration by fraction division method	<ul> <li>Using a suitable method relevant to this course.</li> <li>Active participation in the classroom is evidence of the student's commitment and responsibility</li> </ul>	daily tasks
14st	3	Recognize the concept of partial fractions and use it by integration	Applications on integration	<ul> <li>Managing the lecture in a way that emphasises the importance of time.</li> <li>Encouraging correct answers and discussing incorrect answers instead of punishing them.</li> </ul>	daily exams

	15st	3	<ul> <li>Finding area the curve a applications i science</li> <li>Calculating areas and volu- geometric s</li> </ul>	as under nd its n other s surface umes of hapes	s under Appli d its on int other surface mes of apes		•	Using a suitable method relevant to this course. • Active participation in the classroom is evidence of the student's commitment and responsibility	Class assignments
				С	ourse E	valuation			
	Module				ule Eva	aluation			
			Week	Wight	/Mark	Time	/no.	As	
L	D #1, #2 ai	nd #10, #11	5 and 10	10%	(10)	2		Exams	
I	.O #3, #4 a	and #6, #7	2 and 12	10%	(10)	2		Assignments	
	A	1	Continuous	0%	(0)	0		Projects	
	LO #5, #8	and #10	13	0%	(0)	0		Report	
	LO #1	l <b>- #7</b>	7,12	20%	(20)	1h	r	Exam mid-course	
	A		16	60%	(60)	3h	r	Final exam	
				100% (10	0 Marks)			Total assessment	
				Learning	and Tea	ching Re	sources	5	
	Required textbooks (curricular books, if			f any)	2- '	Thoma	s. G. B., Calculus a Geomatry, 4th , 1	and Analytic 984.	
	Main references (sources)				Durfee. V	<b>W.H, C</b> a	alculus and Analy New York, 1971.	tic Geometric,	
	Re	commen	ded books and	reference	es				
		(scienti	fic journals, rep	oorts…)					
		Electron	c References, V	Websites		w	ww. Fr	eescience.info	/math

<b>Course Description Form</b>						
		1. Course Name:				
		Principles of Management				
		2. Course Code:				
		3. Semester / Year:				
		First semester 2023/2024				
		4. Description Preparation Date:				
		17/3/2024				
		5. Available Attendance Forms:				
	6 N	Being present in class				
	0. 1	Number of hours (30) / Number of units (2)				
7. C	ourse	administrator's name (mention all, if more than one name)				
		Name: MAJID FAHEM JAAFAR				
		Email: MAJID.F.JAAFAR@qu.edu.iq				
		8. Course Objectives				
Course Objectives Providing the		Providing the student with a cognitive skill about the				
		concept, specifications and importance of busines				
		management in general in terms of administrative				
		organization and the basic principles of organization				
		9. Teaching and Learning Strategies				
Strategy		1-Thinking strategy according to the student's ability				
		2- High thinking skill strategy				
		3-Critical thinking strategy in learning				
		4-Brainstorming				
	<u> </u>					

WeekHoursRequired Learning OutcomesUnit or subject name methodLearning methodEvaluation method12For the stude to learnThe nature of managemen and its developmenTheoreti1-Feed educatic22For the stude to learnManager dutiTheoreti1-Feed educatic22For the stude to learnManager dutiTheoreti1-Feed educatic32For the stude to learnDevelopment administrativTheoreti1-Feed educatic32For the stude to learnDevelopment administrativTheoreti educatic1-Exar math educatic42For the stude to learnPlanning and decision makingTheoreti educatic1-Feed from stu decision making42For the stude to learnPlanning and decision makingTheoreti educatic1-Feed from stu decision making52For the studeTheoreti administrativ1-Faced administrativ452For the stude to learnTheoreti administrativ41For the stude to learnPlanning and adecision makingTheoreti administrativ42For the stude to learnPlanning and adecision makingTheoreti administrativ52For the studeTheoreti administrativ1-Faced administrativ411Faced administrativ1-Faced administrativ42								
WeekHoursRequired LearningUnit or subject nameLearningEvaluation meth12For the studeThe nature cTheoreti1-Feed12For the studeThe nature cTheoreti1-Feed12For the studemanagemeneducaticfrom st.22Por the studeManager dutiTheoreti1-Feed22For the studeeducaticfrom st.32For the studeDevelopmentTheoreti1-Feed32For the studeDevelopmentTheoreti1-Faed42For the studeDevelopmentTheoreti1-Exar42For the studePlanning andeducaticfrom st.42For the studePlanning andeducaticfrom st.42For the studePlanning andeducaticfrom st.42For the studePlanning andeducaticfrom st.42For the studePlanning andeducaticfrom st.52For the studeTheoreti1-Feedadministratic52For the studeTheoreti1-Feed	10. Course Structure							
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12For the stude to learnThe nature of managemen and itsTheoreti educatio1-Feed from str and its22Manager dutiTheoreti educatio1-Feed method expres with f22Manager dutiTheoreti educatio1-Feed educatio32For the stude to learnDevelopment administrativTheoreti educatio1-Feed educatio32For the stude to learnDevelopment administrativTheoreti educatio1-Exar method express with f 3-Lear math administrativTheoreti educatio1-Exar method express with f 3-Lear math decision making42For the stude to learnPlanning and decision makingTheoreti educatio1-Feed from str administrativ educatio42For the stude to learnPlanning and decision makingTheoreti educatio1-Feed math administrativ42For the stude to learnPlanning and decision makingTheoreti administrativ1-Feed educatio42For the stude to learnPlanning and decision makingTheoreti administrativ1-Feed educatio52For the studeTheoreti administrativ1-Feed educatio1-Feed administrativ			Outcomes		method			
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5     2     For the stude     Theoreti     1-Food						with face:		
5     2     For the stude     Theoreti     1-Feed						3-Learnin		
5     2     For the stude     Theoreti     1-Food						matrix		
52For the studeTheoretic1-Food						4- Report		
5 2 For the stude Theoreti 1-Food						and studie		
First month avam Incored I-reed	5	2	For the stude	First month avan	Theoreti	1-Feedbac		
to learn to learn education from stu			to learn	r iist montui exalli	educatio	from stude		

6	2	For the stude to learn	Designing the	Theoreti educatio	2-The method o expression with faces 3-Learnin matrix 4- Report and studie Exams
			public function and organizational structure		
7	2	For the stude to learn	Organization - Designing th public functio and organization structure	Theoreti educatio	1-Exams of various typ 2-Feedbac from studer 3-The method of expression with faces 4-Learnin matrix 5- Report and studie
8	2	For the stude to learn	- Authority (authority)	Theoreti educatio	1-Feedbac from studer 3-The method o expressio with faces 4-Learnin matrix
9	2	For the stude to learn	- Internal organization relations	Theoreti educatio	1-Exams c various typ 2-Feedbac

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	Public Relatio Department	method o expression with faces 3- Report and studie				
11. Co	ourse Evaluation					
First month Second mont Daily preparation a Final ex Tota	nly exam (15 marks) thly exam (15 marks) nd participation (10 marks) xam (60 marks) l (100 marks)					
12. Learning a	and Teaching Resources					
Required textbooks (curricular books, if any)	Principles of Busin Khali	ness Administration - Di Al-Shamaa				
Main references (sources)	Basics of Busine	ss Administration - Dr. di Hassan				
Recommended books and references	Scientific journals in administrative, social					
(scientific journals, reports)	and psychology disciplines					
Electronic References, Websites	Specialized websites					
Course Name.33						
Course Code.34						
Semester	r/ year.35					
description was pr	enared Date this.36					
	2024/25/2					
A. Available at	ttendance forms.37					
Daily attendance according to the scheduled schedule						
30						
(Name of the course administrator	(if more than one name is	mentioned.39				
Name: Nashwan Jabbar Kazem						
: EmailNashwan.j.kadhim@qu.edu.iq objectives Course 40						

Educating the student about the crimes -1	Objectives of the study	subject
committed by the Baath regime in Iraq		
Guiding the student to become familiar with -2		
. crimes		
Educating the student about the seriousness of -3		
.crimes		
Teaching and learn	ing strategies.41	
Knowledge and understan	nding -A	The strategy
Ensuring the highest understanding and explanation	on of the most prominent crimes	
.committed by the former reg	gime in Iraq	
Learning outcomes, teaching, learning	ig and assessment methods	
Identify the crimes committed by the B	aath regime that fall within	
international issues. Crimes that! Introducin	g students to the most prominent	
violations of Irac	qi laws	
ing the seriousness of crimes to the enviro	nment, such as burning Explain	
.orchards, draining m	arshes, etc	
Education met	hods	
Written lectur	res -	
Question and answer with	hin the lecture -	
Making repor	rts -	
Evaluation	1	
Students are evalu	lated by	
in the classroom The theo	retical exam - 1	
Daily exam	-2	
class activity-Prepar	re an in -3	
Question, answer and pa	articipation -4	
Monthly exan	n -5	
specific skills-Subject	t -B	
Apply all vocabulary theoretically a	nd work on it -B1	
these crimes and working to The possibility of wo	orking on a serious study of -B2	
.reduce them		
Teaching and learning m	nethods	
Written lectures -		
Application of theory within	the lecture -	
Evaluation method		
) Asking questions and discussing them during the	e lecture, daily theoretical exams	
quiz ) . skills Thinking (	ч	
- Teaching students the mechanism of	, thinking in a scientific manner	
- Teaching students the incentarism of	luction	
.analysis and ded Mativating students to find wali	ation weblance and solve them	
- Motivating students to find realis	suc problems and solve them	

		.scientifically			
Brainstorming	g r gave stu	dents an opportunity to prese	ent and discuss t	hei	
		.ideas			
		Lectures			
	Intelle	ctual questions and discussio	ns		
gnivig yb "t .them a clea	Teaching a xet a yb tpecxe t r voice about th	and learning methods nemhsinup on dna emirc on f e general rules that govern al	o elpicnirp ehT" l or most crimes		
	meth -	ods Evaluation .Written exams			
	]	Daily exams and surprises			
- The s	tudent senses th	e extent of the students' unde	rstanding of the		
		.subject matter			
		Oral questions			
General and transfera	ble skills ( other	skills related to employabilit	y and personal ·	-D	
Dosoanah	(e	lopmentdev	- the tenia D1		
. Kesearch Reviewir	SKIIIS IOF DOOKS	and research closely related i	to arimes -D1		
•1\UV1Uvv11	lg internationar	IAWS AND CONVENTIONS I CLARED			
.Skills in usin	g the Internet a	nd the electronic search mech	anism -D3		
		Course structure .42			
Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
Written lectures	View lectures	The concept of crimes and	То	2	1
	and class	their types	distinguish		
	contributions		between the		
			crimes and		
			their		
			categories		
Written lectures	View lectures	Types of international	To learn about	2	2
	and class	crimes	international		
	contributions		crimes		
Written lectures	View lectures	Political crime	<b>To learn</b>	2	3
	and class		about		
	contributions		crime		
Written lectures	View lectures	Social crime	To learn about	2	4
	and class		social crime		
	contributions				

lectures Written	View lectures and class contributions	The crime of suppressing the Shaabani uprising	Recognizing the crime of suppressing the Shaabani uprising	2	5
theoretical	View lectures and class contributions	Psychological crimes and their effects and the most prominent violations of the Baath regime in Iraq	To learn about psychological and social crimes and the most prominent violations of the Baath Party	2	6
theoretical	View lectures and class contributions	Crimes of the Baath regime according to the Iraqi Supreme Criminal Court Law 2005	The student learned about the Baath crimes according to the Iraqi Criminal Court law	2	7
Theoretical lecture	View lectures and class contributions	The crime of disrupting Friday prayers	learn To the about crime of causing Friday prayers	2	8
lectures Theoretica	View lectures and class contributions	Mass grave crimes	Watch and display video documents of crimes	2	9
Theoretical lecture	View lectures and class contributions	Bombing of holy shrines, mosques and Husseiniyas	View and display image documents	2	10
Written lectures	View lectures and class contributions	on Chemical attack Halabja	Learn about the chemical attack on .Halabja Watch and display video documents	2	11
Written lectures	View lectures and class contributions	The use of internationally prohibited weapons and the dangers of mines	learn To about the use of internationally banned weapons and the dangers of mines	2	12
Written lectures	View lectures	Environmental crimes of	To learn about	2	13

	and class contributions	the Baath reg	ime in Iraq	the environmental crimes of the Baath regime		
Written lectures	View lectures and class contributions	The cemeteries of the genocide committed by the Baathist regime in Iraq		To learn about the events of extermination cemeteries	2	14
Exam		Ex	am		2	15
Course evaluation.43 student, such as daily Distribution of the grade out of 100 according to the tasks assigned to the preparation, daily, oral, monthly, written exams, reports, etc.						
	Learn	ing and teachi	ng resource	es.44		
The course book, Ci	rimes of the Baa	th Regime in	(Requ	ired textbooks (1	nethodo	logy, if any
Iraq, is presented by the Ministry of Higher Education and Scientific Research						
Archives of the Political Prisoners Foundation n (Main references (source			ces			
			Recommended supporting books and references			
			(scientific journals, reports)			
			Ele	ctronic reference	es, Inter	net sites

Course Name.45	
human rights	

Course	sa Cada 16
Cours	human rights
C	
Semes	ter/ year.4 /
Semester The	e first and second 2023/2024
Date this descrip	tion was prepared.48
	2024/25/2
A. Available	attendance forms.49
Daily attendance ac	ccording to the scheduled schedule
study hours (total)/nu	mber of units Number of.50
	(total)
	60
Name of the course ad	lministrator (if more than .51
(one nam	e is mentioned
Name: N	ashwan Jabbar Kazem
address email T:	heNashwan.j.kadhim@qu.edu.iq
object	ives Course.52
Introducing students - 1	
to human rights and	
. duties towards society	
Following up on the - 2	
nistorical roots of	
knowledge of numan	
rights and the stages of	
their development	
. throughout the ages	
Consolidating the - 3	
concents of right.	
n freedom, and duties o	
the individual and	<b>Objectives of the study subject</b>
. society	
Explaining the - 4	
constitutional articles in	
the Iraqi constitution	
that relate to human	
rights and explaining	
. them to students	
Hignlighting the - 5	
the individual's wights	
in performing his duties	
in performing his duties	

. the fullest extent to	
Shedding light on -6	
democracy and	
knowing its many	
.forms	
Teaching and learning strategies	.53
<b>Cognitive objectives -A</b>	
Students benefit from knowing the -A1	
types of rights and the scope of their	
.application	
Clarifying the historical stages of -A2	
human rights and the extent of their	
.development	
Knowing the concept of freedoms -A3	
.and democracy correctly	
Providing the student with the -A4	
moral values that require adherence to	
and clarifying the most important	
ights and duties entrusted to the r	
.individual	
Identifying the rights and duties of -a5	
the Iraqi individual	The strategy
The skills objectives of the course -B	
-1 Introducing the history of	
human rights and the stages of	
.development	
-2 Spreading culture and	
g students from the Islamic nurturin	
.aspect	
-3 How to preserve society and the	
country by strengthening the country's	
.love for them	
-4 Identify the most important	
rights granted to them in accordance	
with international norms and laws	
-5 .zenshipEnhancing student citi	
<b>Teaching and learning methods</b>	

- Electronic lectures	
- Video recordings	
- Audio recordings	
- Discussion sessions	
- Reports	
<b>Evaluation methods</b>	
- Written exams	
- Oral exams	
- Duties assigned to students	
- Reports	
goals based-Emotional and value -C	
Teaching students to search for -C1	
realistic problems, link them to the	
scientific material, and present them in	
.a logical order and sequence	
Urging students to be objective in -	
discussions about the challenges facing	
.the country	
concept of freedom Embodying the -	
for students and clarifying wrong	
practices, their consequences, and how	
.to avoid them	
Giving the highest priority to the -C2	
.expression of rights	
Emphasizing the importance of -C3	
.human rights	
.Objectivity in discussions -C4	
g and learning methodsTeachin	
Relying on evidence and concrete,	
realistic examples of human rights and	
the concept of democracy that reflect	
the nature of society and the	
environment that embraces the	
.individual	
- Teaching students the	
a scientific mechanism of thinking in	
.manner , analysis and deduction	
- Motivating students to find	
realistic problems and solve them	
.scientifically	
Brainstorming gave students an	

0	pportuni	ty to present and	d discuss			
		.their ideas				
	Ţ.,	Lectures	ang and			
	- 10	ions and				
	Evaluation methods					
	Written exams					
	Daily exams and surprises					
-	The s	student senses th	ne extent of			
t	he studen	ts' understandi	ng of the			
		.subject matter	0			
	-	.Oral questi	ons			
-	Try	ing to apply hur	nan rights			
	and the c	oncept of demo	cracy to			
	.rea	lity contempora	ary			
tra	transferable skills (other skills related					
	to emplo	oyability and pe	rsonal			
		(development				
]	Research	skills for books	and -D1			
rese	earch clos	ely related to th	e history of			
	human ri	ghts and the co	ncept of			
		.democracy				
int	ternationa	I laws and Rev	iewing -D2			
.0	convention	is related to hui	nan rights			
- .a	SKIII nd the ele	s in using the in ectronic search i	nechanism			
		Course struc	ture .54			
	Learni					
Evaluati	ng	Name of the	Required	hours	the	
method	metho	unit or topic	outcomes	nours	k	
	d	Dresonting				
		the subject's				
		vocabulary				
	Lectur	to students	View the			
nothing	es	and the	study	2	1	
		study plan in order to	programme			
		commit to				
		implementin				

		g it			
discussio	Lecture	The concept - of human rights Characteristic and types of .human right	Identify the types of rights and areas of their application	2	2
discussio n	Lectur es	Historical - development of human .rights Human - rights in ancient .times		2	3
Daily exa	Lecture and discussio	Human - rights in The Middle Ages Human - rights in the present era	tracking The historical	2	4
discussio	Lectur	Human rights i divine laws	roots of the	2	5
A surpris exam	Lecture	The most important human rights stipulated by laws (the Qur's and Sunnah) governments a organization	the concept of human rights	2	6
discussio	Lecture and discussio	Human rights in Islam Imam Ali bin Abi Talib between man a his duties		2	7
Written	Writter	Exam 1		2	8
discussio	Dialogu semina	Message of Ima Sajjad (peace - be upon him) o human right	Explanation and clarification of the most important concepts	2	9

			addressed in -Imam al Sajjad's peace be ) upon him) treatise on rights, in an attempt to embody these concepts in daily life		
discussio	Lecture and discussi	The concept of citizenship the rights - duties of and the citizen		2	10
discussio	Lecture and discussio	-Non governmenta l organization s and their role in defending human rights		2	11
discussio	Lecture and discussio	Rights and freedoms in the Iraqi Constitution of 2005		2	12
discussio	Worksh	Universal Declaration of Human Rights and Freedoms	Introducing the Universal Declaration of Human Rights and its importance, considering the summary of what humanity has achieved after going	2	13

			through the two world wars		
discussio	Lectures discussi	-Women's rig children's rigl in Islam		2	14
Written exam	Writter exam	Exam 2		2	15
C	'ourse str	ucture for tl	ne second sem	ester	
Evaluati	Learnin	Name of	Required	hou	the
on	g	the unit or	learning	rs	wee
method	method	topic	outcomes	15	k
discussio	Lecture	The concept of democracy	Explain ng the concept of democra cy	2	1
Daily exa discussion	Lecture	Historical developme nt of the concept of democracy		2	2
discussio	Lectures discussio	The developme nt of democracy in the ancient era	Open discussions on the importance of	2	3
	Lecture	Forms and characteristi of democra	democracy in society	2	4
discussio	Lectures discussio	Pillars of democracy		2	5
discussio	Lectures brainstor ng	of Principl the democra system and factors leadi to democrat transformat		2	6
Written exam	Written exam	Exam 1		2	7
	Discussio lecture	Basic or individual freedom	Embodying the concept of freedom for	2	8
Daily exam	Lecture	e Intellectua	students and	2	9

discussion		and	cultura	clarifying			
		The d	reedom	wrong		10	
disquesia	Looturo	Ine	uture	practices, their	2	10	
uiscussio	Lecture	or p free	adoms	and how to	2		
		Scie	ntific an	avoid them			
	_	te	chnical				
discussio	Lectures	pro	gress ar		2	11	
	discussio		oublic				
		fr	eedoms				
discussio	Lectures	Fre	edoms i		2	12	
uiscussio	discussio	Islam					
	<b>.</b>	The <b>I</b>	nature			10	
discussio	Lectures	c (	of 1		2	13	
	discussio	free	doms				
			lsiam				
		svmr	nuing a				
		addr	essing t			14	
	<b>.</b>	n	egative				
discussio	Brain	phe	enomena		2		
	stormin	from	resulti				
		W	rongful				
		hum	an righ				
		p	ractices				
Monthly	Monthly	Exam 2			2	15	
exam	exam	0		ation 55			
Distrib	U ution of the	ourse	e evalu	auon.55 100 according to t	ha tack	'C	
assigned	to the stude	nt su	c out of ich as de	aily preparation	lailv oi	.s ral	
assigned	.writter	i exan	as. repo	rts. etc 'monthly	iaiiy, 01	a1,	
	Learning	and	teachi	ng resources.56			
Bin	ding (hur	nan	Requ	ired textbooks (m	ethodo	logy, i	
	(right	S		(any			
		• 4		(Main references	(sourc	es	
BI	Binding subject		Reco	mmended support	ing boo	oks	
	freedoms.		and references (scientific journals,			als,	
	Conscie	nce		(reports			
The li							
-Imam Z	Layn al						
Abidin (	peace		Elec	ctronic references.	ces, Internet site		
be upon	him), a			,			
study	and						
analysis	of the						

scholar Sayyid	
-Baqir Sharif al	
.Qurashi	
Mr. Ali	
Muhammad	
Dakhil	

Course Name: • Principles of economics

Course Code: •

Semester / Year: •					
		(Fall) First 2023-2024			
Description Preparation Date: •					
		Tuesday, 19 March 2024			
	Av	ailable Attendance Forms: •			
		Classroom			
	<u> </u>				
Number of	f Cr	edit Hours (Total) / Number of Units •			
		(10tal)			
		30			
Course	adn	ninistrator's name (mention all, if •			
		more than one name)			
		Name: M. Dr Halah Hashim Kazem			
Email: halah.hashim@qu.edu.iq					
Course Objectives					
Course Objective 1 – Objectives and educational benefit in analyzin					
		micro and macro economic theory			
		2- Identify the most important theories that addre			
		consumer behavior, product behavior, and balanc			
		in markets			
		3- Recognizing the importance of economic theory			
		micro policy-making			
		4- Identify the theoretical and mathematical			
		applications of the theory			
Т	eacl	ning and Learning Strategies •			
Strategy		1- Definition of economics and micro a			
		macro economic theory			
		2-The importance of economic theory			
		economic analysis			
		3- Using mathematical methods in			
		theoretical application			

	Course Structure •						
			-				
	-Conduct daily examinations						
	- Discussing an economic problem						
	topic						
	- As	sking some q	uestions ext	ernal to th			
and explaining the material							
	-The	e student's pa	articipation	in prepari			
	C2	(evalua	ation metho	ds)			
	A	m uie article xamples fron	by presention the econor	ng some nic reality			
- Stimulating understanding of the tra							
in correcting the economic path							
	- The role of some economic theory to						
	- Graphical and mathematical analysis						
	reality with the theoretical aspect						
	gi	iving exampl	es from real	lity to link			
	- E	xplaining the	material th	eoretically			
		Teaching an	d learning r	nethods)			
	4-	Learn about	economic p develop th	olicies and			
	4	r Lesans also est	esources	. 1: .:			
	ec	onomic tools	in directing	g economi			
	3 <b>-</b> T	he effectiven	less of micro	o and maci			
	-	econo	mic problen	ns			
	2-	Identify app	ropriate wa	vs to solve			
	1- A	pplications of	of flexibility	in econom			
	]	B- Skill objec	tives for the	e subject:			
	6- Cost market analysis						
	forms in the economy						
	J- 10	5- Identify the type of markets and the					
	5- Io	dentify the ty	pe of marke	ets and the			
		1- A 2- 3-T ec 4- ( - E: gi 1 - Gr : - Th - Sti ex - The - As	B- Skill object 1- Applications of 2- Identify app econo 3-The effectivent economic tools r 4- Learn about ways to (Teaching an - Explaining the giving exampla- reality with t - Graphical and r th - The role of some in correcting - Stimulating und in the article examples from (evalua- -The student's pa- and explai- - Asking some q - Discussing a- - Duties assi- - Conduct of	B- Skill objectives for the 1- Applications of flexibility policies 2- Identify appropriate wa economic problem 3-The effectiveness of micro economic tools in directing resources 4- Learn about economic p ways to develop th (Teaching and learning r - Explaining the material th giving examples from real reality with the theoretic - Graphical and mathematica the material - The role of some economic in correcting the econor - Stimulating understanding in the article by presenti examples from the econor (evaluation method -The student's participation and explaining the material - Asking some questions ext topic - Discussing an economic - Duties assigned to the -Conduct daily examin			

k	s	d	subject	method	n method
		Learnin	name		
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		Gain	Familiarity	Lootu	Qu
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			problem	discu	
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		course	supply	usin	
			function ar	data	
			equation	the	0
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	Gain knowled	examples		c
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	course			
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	Gain	utility theo	tion	
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		Costs in th	Data	
	Gain	short tern	blackt	
	knowled		rd	
	course			

Que ns disc c	Data blackt rd	Costs in the long term	Gain knowled from thi course	
Hoi c Que ns disc	Data blackt rd	Product balance, minimizin costs and maximizin profits	Gain knowled from thi course	
Que ns disc	Data blackt rd	Markets	Gain knowled from thi course	
	Data blackt rd	Market equilibriu	Gain knowled from thi course	
	Lectu discu on,	total		

	ecoi	nomy	dialog , an interro tion usin data the blackt rd	
			Data blackt rd	
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				
Learning and Teaching Resources •				
Required textbooks (curricular boo if any)		Book of Principles o Economics (Profess Dr. Kamel Allawi Kazem, Prof. Dr. Hassan Latif		
Main references (sources)		Book of Principles of Economics Dr. Abdel Moneim Al-Sayed Ali		
Recommended books and		Network of Iragi Economis		
references (scientific journals,				
reports)				
Electronic References, \	Nebsite			

**Course Description Form**
		57. C	ourse Nam	e:				
		Introduction to Sta	tistics first	course				
		58. (	Course Cod	e:				
59. Semester / Year:								
	2023/2024							
		60. Descripti	on Prepara	tion Date:				
		61.Available Att	endance For	rms:				
		Att	endence					
	62.1	Number of Credit Hours (To	otal) / Numb	er of Units (T	otal)			
		6	0 hours					
6	3 (	Course administrator's na	me (menti	on all if more	than one			
		na	ime)					
		Name: Prof. Dr. M	uhannad F	. Al-Saadony				
		Email: muhannad	l.alsaadony	/@qu.edu.iq				
		64. Cour						
	C	ourse Objectives	Understar	I ding the basics	of Statistics tools			
			•					
			•					
		(5 Teeching on		Ctratagiag	•••••			
		65. reaching and	a Learning	Strategies				
Stra	itegy							
	·	66. Course	Structure					
Week	Hours	Required Learning Outcor	nes Unit	Learning	Evaluation			
			or	method	method			
			subj					
			ect					
			nam					

			е				
1 <sup>st</sup>	2	Definition of Statistics and		Pure and	exercises		
<b>n</b> d		Its importance.		application			
Z <sup>nu</sup>	Z	Data conection					
3rd	2	Checking Data collection					
$4^{th}$	4	Random variable & presentii					
		the data using					
		table					
5 <sup>th</sup>	4	Presenting					
6 <sup>th</sup>		Presenting					
0		Data : A table					
$7^{th}$	4	Presenting Data					
		Geometrical					
$8^{th}$	2	Presenting Data					
		Geometrical					
9 <sup>th</sup>	2	Central tendency measures					
$10^{\text{th}}$	4	Central tendency measures					
11 <sup>th</sup>	2	Central tendency measures					
$12^{th}$	2	Central tendency measures					
13 <sup>th</sup>	4	Central tendency measures					
$14^{th}$	4	Relations between some					
		central tendency measures					
<b>1</b> Տեհ	4	The final exam					
10	1						
		67. Course Evalua	ation				
Distri	buting the daily pre	score out of 100 according to the ta eparation, daily oral, monthly, or wr	sks ass ritten e	igned to the stue xams, reports	dent such as . etc		
		68. Learning and Teachin	g Res	ources			

Required textbooks (curricular books, if any)	
Main references (sources)	
Recommended books and references	
(scientific journals, reports)	
Electronic References, Websites	

	Course Name:
Introduction to Statis	stics Second course
70.	Course Code:
71. Se	emester / Year:
2023	/2024
72. Descript	ion Preparation Date:
73.Available At	tendance Forms:
At	tendence
74.Number of Credit Hours (T	otal) / Number of Units (Total)
6	0 hours
75. Course administrator's na	ame (mention all, if more than one ame)
Name: Prof. Dr. M	Iuhannad F. Al-Saadony
Email: muhanna	d.alsaadony@qu.edu.iq
76. Cou	rse Objectives
Course Objectives	Understanding the basics of Statistics tools
	Using some softwares
	•
	•
77. Teaching an	d Learning Strategies
Strategy	

	78. Course Structure								
Week	Hours	Required Learning Outcomes	Unit or subj ect nam e	Learning method	Evaluation method				
1 <sup>st</sup>	2	Dispersion measures		Pure and	exercises				
2 <sup>nd</sup>	2	Dispersion measures		apprication					
3rd	2	Dispersion measures							
4 <sup>th</sup>	4	Dispersion measures							
5 <sup>th</sup>	2	Moments							
$6^{th}$	2	Skewness							
$7^{th}$	2	Kurtosis							
8 <sup>th</sup>	2	Simple linear Correlation Coefficient							
9 <sup>th</sup>	2	Partial Correlation Coefficient							
$10^{\text{th}}$	2	Multiple Correlation Coefficient							
$11^{th}$	4	Rank Correlation							
$12^{th}$	2	Association Coefficient							
13 <sup>th</sup>	2	<b>Contingency Coefficient</b>							
$14^{ ext{th}}$	2	Simple Linear Regression							

15 <sup>th</sup>	4	The final exar	n			
		79. Cours	e Evalu	ation		
Distri	buting the daily pro	score out of 100 according eparation, daily oral, month	to the ta ily, or wi	sks ass ritten e	igned to the stu xams, reports	dent such as . etc
		80. Learning and	Teachin	g Res	ources	
Requ	uired textboo	oks (curricular books, if any)				
	eferences (sources)					
Rec	books and references					
	ournals, reports)					
	References, Websites					

## Second stage

1. Course Name:					
Principles of probabilities					
2. Course Code:					
3. Semester / Year:					
First course 2023-2024					
4. Description Preparation Date:20/3/2024					
20/3/2024					
5. Available Attendance Forms:					
Official attendance					
6. Number of Credit Hours (Total) / Number of Units (Total)					
45 hours and 3 units					
7. Course administrator's name (mention all, if more than one name)					
Name: Asst. Prof. Dr. Taha Hussein Ali Email: Taha.alshaybawee@qu.edu.iq					
8. Course Objectives					

Γ								
Co	urse Ob	jectives	The course aims to prepare the student in the basics of					
			The student should know the possibility of applying the					
			The st	foundations of probability	theory in pro	applying the		
			The stu	dent should know identi	fying spaces a	und events for		
			The stu	nhenome	rying spaces a	ind events for		
				phenome				
			9. T	eaching and Learning Str	ategies			
Sti	rategy	Cont	inuous co	mmunication and intera	ction betwee	n the student an		
			the tea	cher, whether inside or	outside the cl	assroom.		
		Er	ncouraging	g cooperation among stu	dents, as lear	ning is further		
				enhanced when it is in a	a group forma	at.		
				10. Course Structure				
Week	Hou	Re	quired	Unit or subject name	Learning	Evaluation		
	rs	Le	arning		method	method		
		Out	tcomes					
1	3	Fundamental Principle		Arrangements	Theory	General questions a		
2	2	Of	Counting ental Principle	Dermutations	Theory	discussion		
Z	3	Of	Counting	remutations	Theory	3discussion or ily ex		
3	3	Fundame Of	ental Principle Counting	Combinations	Theory	General questions a discussion		
4	3	the basis of probability		Probability Axioms	Theory	General questions		
			theory			exam		
5	3	Introdu	ucing the set theory	Sample spaces, Events	Theory	General questions a		
6	3	Introdu	ucing the set	Mutually Exclusive Events	Theory	General questions		
	-		theory			discussion or dail		
7	3	Intro	oducing the	Law of Total	Theory	General questions a		
	0	concept	of probability	Probability		discussion		
8	3	Int	roducing	Conditional Probability	Theory	General questions		
		conditio	nai probability			exam		
9	3	Conce	ept of Events	Independent Events	Theory	General questions a discussion		
10	3	Detern	nine the main	Bayes Rule	Theory	General questions		
		idea of	f Bayes Rule			discussion or dail		
11 3 Show the main		e main idea of	Definition of a Random	Theory	General questions a			
	random variable		om variable	Variable		discussion		
12	3	Show	w the main	Cumulative Distribution	Theory	General questions		
		dist	. function	Functions		exam		
13	3	Introduc	ing the student	Probability Density	Theory	General questions a		
		the	Density	Functions and Probability		aiscussion		

		Functions and	mass functions			
14	3	mass functions Introducing some other important function	Other Related functions: Hazard function, Survivor function, Reverse Hazard function		Theory	General questions discussion or dail exam
15	3	Final exam	Fir	nal exam	Theory	
			11. Cours	se Evaluation		
	- C	- evaluated the stue onducting daily oral Conducting monthly 12. Le	dents by son and some a <u>exams and</u> earning and	ne exercises at pplied example final exam to Teaching Res	oout probabilitions about probabilitions about probab evaluating stud sources	es. ilities. ents.
Req	juired te	extbooks (curricular b	oooks, if any)	1- Intro st 2- Moder	duction to ma atistics, Hogg n probability t application, F	athematical & Craig. theory and its Parzen
	М	ain references (sour	ces)	Introduction to probability theory. Dr. Abdul Majid Hamza Al-Nasser		
Re	comme (scier	ended books and refe ntific journals, reports	erences )	All scientific j informatio	ournals, periodi on about statisti	icals that contain ical inference
	Elect	ronic References, We	ebsites	All websites s	specialized in pr	obability theory

1. Course Name:					
Sampling Techniques					
2. 2. Course Code:					
3. Semester / Year:					
2023-2024					
4. Description Preparation Date:20/3/2024					
20/3/2024					
5. Available Attendance Forms:					
Official attendance					
6. Number of Credit Hours (Total) / Number of Units (Total)					

	45 hours and 3 units								
7. Course administrator's name (mention all, if more than one name)									
	Name: Mayada Jwad Email:								
			8.0	Course Objectives					
Co	ourse Ob	ojectives	<ul> <li>It aims to i</li> </ul>	dentify the sampling me	ethods and data	collection so			
			that the d	ata can be analyzed and	d interpreted in a	logical and			
			acceptable	e manner so that the co	nclusions about	the study are			
				correc	:t.				
			<ul> <li>Introducir</li> </ul>	ng the techniques to det	ermine the size o	of the sample			
			drawn f	rom population about	ohenomenon und	ler study is			
				determi	ned.				
			9. Teachin	g and Learning Stra	tegies				
		and v l Encou	writing notes, l earn and corre iraging cooper enhanc 10. 0	but by talking and v elated it to their pro- ration among stude red when it is in a gr Course Structure	vriting about evious experi nts, as learnir roup format.	what they ences. ng is further			
Week	Hou	Reau	ired Learning	Unit or subiect	Learning	Evaluation			
	rs	c	outcomes	name	method	method			
1	3	3 How to select a simple random sample, estimate symbols and terms, estimate the population mean and total		simple random sample	Theory	General questions and discussion			
2 3 Estimati the pop total and for the po total, proport sample s populati		ng the variance of ulation mean and confidence interval opulation mean and estimating the ion, choosing the ize to estimate the on mean, sum and proportion	simple random sample	Theory	General questions, 3discussion or ily exam				
3	3	What samp w	is stratified ling, sample eights in	stratified sampling	Theory	General questions and discussion			

		distribution of			
		observations on			
		the class definition			
		of class			
4	3	Estimating the	stratified	Theory	General
		mean and the	sampling		questions,
		population sum.	F F O		daily exam
		estimating the			-
		variance of the			
		arithmetic mean			
		and the population			
		sum, choosing the			
		sample size to			
		estimate the mean			
		and the sum,			
		estimating the			
		proportion			
5	3	How to select a	regular sample	Theory	General
		regular sample,			discussion
		estimate the mean			
		and the population			
		total		m)	
6	3	Estimating the	regular sample	Theory	General questions.
		variance of the			discussion or
		population mean,			daily exam
		estimating sample			
		size, repeated			
		systematic random			
7	2	Samping Estimating the	Ectimating the	Theory	General
/	3	ratio P Simplo	ratio P Simplo	incory	questions and
		random sample	random sample		discussion
		estimating the	random sample		
		mean and the sum			
		using the ratio			
		choosing the			
		sample size (to			
		estimate the ratio.			
		estimating the			

				-	
		mean and the sum using R), estimating the ratio in a stratified sample			
8	3	Estimating the mean and the total using proportions in a stratified sample, estimating differences in a simple and stratified sample, estimating regression in a simple and stratified sample	Estimating the mean and the total using proportions in a stratified sample	Theory	General questions, discussion or daily exam
9	3	Choosing a cluster random sample from one stage, estimating the arithmetic mean and the sum, estimating the variance of the arithmetic mean and the combined sum, estimating the mean and the sum if the size of the clusters is equal.	Choosing a cluster random sample	Theory	General questions and discussion
10	3	Choosing the sample size to estimate the mean and the total, cluster random sampling in a population divided into strata,	Choosing the sample size to estimate the mean and the total, cluster random sampling	Theory	General questions, discussion or daily exam

		estimating the proportion, choosing the sample size to estimate the proportion				
11	3	Simple random sample (with and without returns), estimation of the R ratio	Simple random sample (with and without returns),		Theory	General questions and discussion
12	3	Systematic sampling, one- stage cluster sampling	Systematic sampling		Theory	General questions, discussion or daily exam
13	3	Double Sampling and Stratification, Ratio and Regression Estimation in Double Sampling	Doub Str	ole Sampling and atification	Theory	General questions and discussion
14	3	Optimal distribution in double sampling	dist doub	Optimal ribution in ble sampling	Theory	General questions, discussion or daily exam
15	3	Final exam			Theory	
		11.	Course	e Evaluation		
		- Daily and mid- - Class act - final course e	-term te ivity ar exam to	ests and examin nd participation o evaluating stud	ations dents.	
		12. Learning	g and <sup>-</sup>	Teaching Reso	ources	
Required textbooks (curricular books, if any)			) Dr. Abdel Majeed Hamza Al-Nasser and Asr Raddam (1989) "Samples"			
Main references (sources)			Thompson, S,K(2002)sampling, -1 2 <sup>nd</sup> Wiley ,New York.			
			Benedetto,j.j.andFerreira.p.J.(200 -2 1). Modren Sampling theory ,			
				B sampath , S.	(2000) . Sam	pling theory ar
	methods, cRc press					

Recommended books and references	
(scientific journals, reports)	
Electronic References, Websites	All websites specialized in Sampling

	1. Course Name:					
	Matr	ices				
	2. Course Code:					
	3. Semest	er / Year:				
	First semeste	r 2023-2024				
	4. Description P	reparation Date:				
	22-3-	2024				
	5. Available Atter	ndance Forms:				
	In c	ass				
	6. Number of Credit Hours (Tot	al) / Number of Units (Total)				
	3 hours	, 3 units				
7.Cou	rse administrator's name (me	ntion all, if more than one name)				
	Name: Asst. Leo	cturer . Hamida Naim				
		Email:				
	8.Course (	Dbjectives				
	Course Objectives	Study of matrices and how to deal with them.				
		Principle of matrices.				
		Using matrices to solve linear equations.				
	9. Teaching and Learning Strategies					
Strategy	1.Continuous communication	on and interaction between the studen				
	and the teacher, whether inside or outside the classroom.					
	2.Encouraging cooperation among students, as learning is furthe					
	enhanced wh	en it is in a group format.				
	10. Course S	Structure				

Week	Hours	Required Learning	Unit or subject	Learning	Evaluation
		Outcomes	name	method	method
1	3	Introducing the student to the concept of matrix	Definition of Matrix , equal matrices, algebraic operations on matrices (addition, subtraction, multiplication by a constant, multiplication)	Lectures Example solution	discussion Daily exams Homework
2	3	Introducing the student to special matrices	Diagonal matrices: upper triangular matrix, lower triangular matrix, (constant-zero-unit-hard- convolved-zero)	Lectures Example solution	discussion Daily exams Homework
3	3	Introducing the student to the special matrices	Transposable matrix, symmetric matrices	Lectures Example solution	discussion Daily exams Homework
4	3	Introducing the student to the special matrices	Symmetry twisted matrices	Lectures Example solution	discussion Daily exams Homework
5	3	Introducing the student to the conjugate matrix	conjugate matrix	Lectures Example solution	discussion Daily exams Homework
6	3	Introducing the student to the transpose of matrix	transpose Matrix	Lectures Example solution	discussion Daily exams Homework
7	3	Introducing the student to Hermitian matrices	Hermitian matrices	Lectures Example solution	discussion Daily exams Homework
8	3	Introducing the student to the Twisted Hermitian matrices	Twisted Hermitian matrices	Lectures Example solution	discussion Daily exams Homework
9	3	Introducing the student to the determinants of matrix	, determinants	Lectures Example solution	discussion Daily exams Homework
10	3		The first determiner and the conjugate	Lectures Example solution	discussion Daily exams Homework
11	3	Introducing the student to determinants	Determinants and algebraic complements	Lectures Example solution	discussion Daily exams Homework
12	3	Introducing the student to determinants	Methods for calculating determinants (share method, first determinant and conjugate method, Laplace method)	Lectures Example solution	discussion Daily exams Homework
13	3	Introducing the student to conjugate matrices	The 2*2 conjugate of the square matrix, the inverse of the matrix	Lectures Example solution	discussion Daily exams Homework
14	3	Introducing the student to inverse matrices	Matrix inverse calculation methods (binary conjugate, partition)	Lectures Example solution	discussion Daily exams Homework

15	3	Student evaluation	Final exam	Score of 40				
	11. Course Evaluation							
	<ul> <li>evaluated the students by some exercises about Matrices.</li> <li>Conducting daily oral and some applied examples about Matrices.</li> <li>Conducting monthly exams and final exam to evaluating students.</li> </ul>							
		12. Learning	g and Teaching Re	sources				
Requ	iired textl	books (curricular books,	if any) Linear A Al-N	lgebra / Abdel Majeed Ham: Iasser, Lamia Baqir Jawad				
	Main	references (sources)						
Rec	ommend	ed books and reference	es					
	(scientifi	c journals, reports)						
	Electror	ic References, Website	s					

1. Course Name:				
Sequences and series				
2. Cou	rse Code:			
3. Seme	ster / Year:			
First semeste	r 2023–2024			
4. Description	Preparation Date:			
22-3-	2024			
5. Available Atte	endance Forms:			
In cl	ass			
6. Number of Credit Hours (To	otal) / Number of Units (Total)			
3 hours ,	1.5 units			
7. Course administrator's name (m	ention all, if more than one name)			
Name: Za	hraa.N.Kazem			
Email: : Zahraa	a.N.kazem@qu.edu.iq			
8. Course	Objectives			
Course Objectives	1Introducing the student to			
	the concept of sequences and			

series
The most important
forecasting methods are using
sequences and series.
2- Teaching the student the
skills of dealing with data
in the form of sequences and
sequences.
3- Teaching the student the
skills of constructing and
estimating models of
sequences and series

#### 9. Teaching and Learning Strategies

Strategy

# Brainstorming strategy 2- Discussion strategy 3- E-learning strategy

#### 4- Teaching strategy with examples

#### 10. Course Structure

Week	Hours Required Learning		Unit or subject	Learning	Evaluation
		Outcomes	name	method	method
1	3	Introducing the student to t purpose, and continuity	Definition of purpose. definition of continuity	Lectures Example solution	discussion Daily exams Homework
2	3	Introducing the student to d Applications on purpose a continuity	Applications on purpose continuity	Lectures Example solution	discussion Daily exams Homework
3	3	Introducing the student to t Definition of derivative	Definition of derivativ	Lectures Example solution	discussion Daily exams Homework
4	3	Introducing the student to T relationship of the derivative continuity s	The relationship of the derivative to continuit	Lectures Example solutio	discussion Daily exams Homework
5	3 Using Lobital base		Lobital base	Lectures Example solution	discussion Daily exams Homework
6	6 3 Introducing the student to Rolle's theory		Rolle's theory	Lectures Example solution	discussion Daily exams Homework
7	3	Introducing the student to t mean value theorem	Mean value theorem	Lectures Example solution	discussion Daily exams Homework
8	3	Introducing the student to t	Approximation using the mean value theorem	Lectures Example solution	discussion Daily exams

		value theorem			Homework	
9	3	Introducing the student to t finding the approximate roo a number using the mean va theorem	Finding the approximate of a number using the me value theorem	Lectures Example solution	discussion Daily exams Homework	
10	3	Introducing the student to T concept of series, convergence and divergence of serieS	The concept of series, convergence and diverge of series)	Lectures Example solutio	discussion Daily exams Homework	
11	3	Introducing the student to T concept of series (numerical geometric series)	The concept of series (numerical and geometrical series)	Lectures Example solution	discussion Daily exams Homework	
12	3	Introducing the student to So common sequences	Some common sequenc	Lectures Example solution	discussion Daily exams Homework	
13	3	Introducing the student to Convergence test for serie	Convergence test for ser	Lectures Example solution	discussion Daily exams Homework	
14	3	Introducing the student to F the radius of convergence of power series statistical software in estima	Find the radius of convergence of the pow series	Lectures Example solution	discussion Daily exams Homework	
15	3	Student evaluation	Final exam		Score of 40	
		11. C	Course Evaluation			
Annu	al endea	vor = daily preparation a Fin	and absences 10 mar nal exam = 60	ks + monthly exa	ams 30 = 40	
	12. Learning and Teaching Resources					
Requ	uired text	oooks (curricular books, i	f any) Cal	culus, Seventl Anton. Bivens	n Edition, . Davis	
Main references (sources)						
Rec	Recommended books and references					
	(scientifie	c journals, reports)				
	Electron	ic References, Websites				

1.Course Name:
Quality Control 1
2.Course Code:

	3.Semester / Year:									
	First semester 2023-2024									
	4. Description Preparation Date:									
	22-3-2024									
	5. Available Attendance Forms:									
				In class						
		6	Number of Cr	edit Hours (Total) / Nur	nber of Units (Tot	al)				
	7 0	our	se administrat	3 nours , 3 units	l if more than or	nama)				
	7.0	Jour	<u>se administrat</u> Na	ame: Asst. Lecturer. S	hada Awad	ie namej				
				Email:						
				8. Course Objectives	S					
Cou	rse Obj	jectiv	es The students sho	ould understand the concept of	quality control and learn	about production qua				
			Use appropriat	e control panels to control the qu	uality of production and it	s compliance with th				
				required spe	ecifications.					
			9. Te	eaching and Learning S	trategies					
Stra	ategy	Со	ntinuous comn	nunication and interac	tion between the	student and t				
			Encouraging	er, whether inside or o	outside the classro	00M. Dog is further				
			Lifeouraging	enhanced when it is in	a group format.	ig is ful thei				
				10. Course Structure						
Week	Hou	rs	Required	Unit or subject name	Learning method	Evaluation				
			Learning		-	method				
			Outcomes							
1		2	Learn about	Introduction to quality contro	Lectures	Discussion Dail				
			quality		Example solutions	Homework				
		2	control	Some concepts of quality cont	Lacturas	discussion				
2	2 2 Learn about		Learn about	some concepts of quanty cont	Example solutions	Daily exams				
	Homewor				Homework					
3 2 L		Learn about	Some tests of significance: test	Lectures	discussion					
			some	the difference between two	Example solutions	Homework				
			significance	arithmetic means						
4	2	-+	Learn about	Testing proportions to societ	Lectures	discussion				
ľ			Bearnabout	testing the difference between	Example solutions	Daily exams				

	some proportions Homework								
		significance							
		tosts							
	2	Idontify the		Natural style	Lectures	discussion			
5	Z	Identify the		Natural style	Example solutions	Daily exams			
		L'Hopital			Ĩ	Homework			
		rule							
6	2			the first exam	Lectures	discussion			
					Example solutions	Daily exams			
7	2	Identify control	(	Quality control panels	Lectures	discussion			
/	Z	panels		quality control pullers	Example solutions	Daily exams			
		-			-	Homework			
8	2	Identify control	Con	trol panels for variables	Lectures	discussion			
		panels			Example solutions	Daily exams			
0	C	Identify control	Δ	rithmetic mean nanel	Lectures	discussion			
9	Z	panels	23	intimiette mean paner	Example solutions	Daily exams			
		I			I	Homework			
10	2	Identify control		range panel	Lectures	discussion			
		panels			Example solutions	Daily exams			
11	2	Identify control		Second exam	Lectures	discussion			
11	Z	panels		Second exam	Example solutions	Daily exams			
		I			I	Homework			
12	2	Identify control	Pa	nel standard deviation	Lectures	discussion			
		panels			Example solutions	Daily exams			
10	0	Identify control	Moving arithmatic madia and		Loctures	Homework			
13	Z	nanels	WIOVI	ng artunnette metia pan	Example solutions	Daily exams			
		F			r	Homework			
14	2	Identify control		Moving range panel	Lectures	discussion			
		panels			Example solutions	Daily exams			
4 5	0			First somester over		Homework Score of 40			
15	Z	Evolution		First semester exam		Score of 40			
		students							
			11. (	Course Evaluation	ı				
	- (	Conducting daily or	ral, writ	tten or applied exar	ns on the calculator				
- Conc	lucting n	nonthly written exa	ams and	d end-of-course exa	ms for the purpose	of evaluating			
	0	-		students.	* *	0			
		12 6	arning	and Teaching Re	sources				
Required textbooks (curricular books, if									
any)									
Main references (sources) - M				- Mitra,amitava,(20	008).fundamentals of	f quality control			
			and i	improvement, 3th ec	1.				
				- Montgomery,	douglas c , (2009).Ir	troduction to			
				Statistica	al quality control, 6	th ed.			
Reco	Recommended books and references								

(scientific journals, reports)	
Electronic References, Websites	All websites specialized in Quality control

	1.Course Name:							
	Language program R 1							
	2.Course Code:							
		3.Semester / Year:						
	First s	semester 2023-2024						
	4.Desci	ription Preparation Date:						
		22-3-2024						
	5. Availa	able Attendance Forms:						
		In class						
	6. Number of Credit H	ours (Total) / Number of Units (Total)						
	3	hours , 3 units						
7. Co	ourse administrator's na	ame (mention all, if more than one name)						
	Nam	ie: prof. Dr. Rahim Jabbar						
		Email:						
	8.	Course Objectives						
	Course Objectives	The course aims to equip the student with knowledge of the basic						
		programming in the R language						
		determine the statistical analysis functions in R language						
		Student knowledge of building analysis and graphics programs us						
	the R language							
	9. Teaching and Learning Strategies							
Strategy	Continuous communi	ication and interaction between the student an						
	the teacher, whether inside or outside the classroom.							
	Encouraging coope	eration among students, as learning is further						

Image: Principle of language R       Unit or subject of language R       Learning method       Evaluation method         1       3       Principle of language R       Principle of language R       Principle of language R       Solutions       Homework         2       3       Arithmetic and logical operations       Lectures       discussion Daily exams         3       3       Input and output data       Vector insertions       Lectures       discussion Daily exams         4       3       Inserting arrays       Lectures       discussion Daily exams       Homework         5       3       Inserting arrays       Lectures       discussion Bonework         5       3       Inserting arrays       Lectures       discussion Bonework         6       3       Install packages       package       Lectures       discussion Bonework         7       3       Install packages       package       Lectures       discussion Bonework         8       3       Install packages       package       Lectures       discussion Bonework         9       3       Import data       Data import methods       Example       Boaly exams         10       3       conducing the student to conditional statements       Lectures solutions       Homework	enhanced when it is in a group format							
Week HoursHours OutcomesUnit or subject nameLearning methodEvaluation method13Principle of language R Principle of language R Principle of language R Arithmetic and logical operationsLectures Examplediscussion Daily exams solutionsHomework Homework Homework33Input and output dataVector insertionsLectures Examplediscussion Daily exams solutionsHomework Homework43Input and output dataVector insertions rows and columnsLectures Examplediscussion Daily exams solutionsHomework Homework53Install packagespackage rows and columnsLectures solutionsdiscussion Homework63Install packagespackageLectures examplediscussion Daily exams solutionsHomework Homework73Install packagespackageLectures examplediscussion Daily exams solutionsHomework Homework83Install packagespackageLectures examplediscussion Daily exams solutionsHomework Homework93Import dataConditional starements solutionsLectures examplediscussion Daily exams solutions103conducing the student to conditional starementsIccures examplediscussion Daily exams solutions113Student to conditional starementsIccures examplediscussion Daily exams solutions<	10. Course Structure							
Outcomes         name         method         method           1         3         Principle of language R         Principle of language R         Lectures         discussion           2         3         Arithmetic and logical operations         Lectures         discussion           3         3         Input and output data         Vector insertions         Lectures         discussion           4         3         Input and output data         Vector insertions         Lectures         discussion           5         3         Inserting arrays         Lectures         discussion         Honework           6         3         Install packages         package         Lectures         discussion           7         3         Install packages         package         Lectures         discussion           8         3         Import data         Data import methods         Lectures         discussion           9         3         Import data         Data import methods         Lectures         discussion           10         3         conducing the statements         If conditional statement         Lectures         discussion           11         3         If conditional statement         Lectures         discussion	Week Hours Required Learning Unit or subject Learning Eval							
1       3       Principle of language R       Principle of language R       Lectures       discussion         2       3       Arithmetic and logical operations       Lectures       discussion         3       3       Input and output data       Vector insertions       Lectures       discussion         4       3       Inserting arrays       Lectures       discussion       Daily exams solutions         5       3       Methods of work with rows and columns       Example solutions       Honework         5       3       Install packages       package       Lectures       discussion Honework discussion         6       3       Install packages       package       Lectures       discussion Honework discussion         7       3       Import data       Dati package       Lectures       discussion Honework discussion         8       3       Methods for installing menus       Example biolitions       Honework Honework discussion         9       3       Import data       Dati import methods       Lectures       discussion Honework discussion Honework discussion         10       3       conducing the student to conditional statements       Lectures       discussion Honework discussion Honework discussion Honework         11       3       Statement			Outcomes	name	method	method		
2     3     Arithmetic and logical operations     Example solutions     Honework discussion       3     3     Input and output data     Vector insertions     Lectures     discussion       4     3     Inserting arrays     Lectures     discussion       5     3     Inserting arrays     Lectures     discussion       5     3     Methods of work with rows and columns     Lectures     discussion       6     3     Install packages     package     Lectures     discussion       7     3     Lists and frames     Lectures     discussion       8     3     Methods for installing menus     solutions     Honework       9     3     Import data     Data import methods     Lectures     discussion       10     3     conducing the student to conditional statements     Conditional statements     Honework       11     3     If conditional statement     Lectures     discussion       12     3     Student to conditional statement     Lectures     discussion       13     3     Student to conditional statement     Lectures     discussion       13     3     Student conditional statement     Lectures     discussion       14     3     for and while loop     Lectures     <	1	3	Principle of language R	Principle of language R	Lectures	discussion		
2     3     Arithmetic and logical operations     Lectures     discussion       3     3     Input and output data     Vector insertions     Example solutions     Daily exams       4     3     Inserting arrays     Example solutions     Homework       5     3     Methods of work with rows and columns     Example solutions     Homework       6     3     Install packages     package     Lectures     discussion       7     3     Lists and frames     Lectures     discussion       8     3     Methods for installing menus     Example solutions     Homework       9     3     Import data     Data import methods     Example solutions     Homework       10     3     conducing the student to conditional statements     Conditional statement     Example solutions     Homework       11     3     If conditional statement     Example solutions     Homework       13     3     switch. statement     Example solutions     Homework       14     3     for and while loop     Example solutions     Homework       13     3     Student evaluation     For and while loop     Example solutions     Homework       14     3     Student evaluation     Final exam     Solutions     Homework					solutions	Homework		
2     3     3     Input and output data     Vector insertions     Example solutions     Homework discussion       3     3     Input and output data     Vector insertions     Lectures     Maily exams       4     3     Inserting arrays     Lectures     discussion       5     3     Inserting arrays     Lectures     discussion       5     3     Methods of work with rows and columns     Example     Daily exams       6     3     Install packages     package     Lectures     discussion       7     3     Lists and frames     Example     Daily exams       8     3     Methods for installing menus     Lectures     discussion       9     3     Import data     Data import methods     Lectures     discussion       9     3     conducing the student to conditional statements     Lectures     discussion       10     3     conducing the student to conditional statement     Lectures     discussion       11     3     If enditional statement     Lectures     discussion       11     3     Student to conditional statement     Lectures     discussion       12     3     Student to conditional statement     Lectures     discussion       13     3     felse condit	2	3		Arithmetic and logical	Lectures	discussion		
3       3       Input and output data       Vector insertions       Solutions       Homework         4       3       Inserting arrays       Lectures       discussion Based of the second Example       Daily exams Homework         5       3       Inserting arrays       Lectures       discussion Based of the second Example       Daily exams Based of the second Homework         6       3       Install packages       package       Lectures       discussion Based of the second Example       Daily exams Based of the second Based	4	5		operations	Example	Daily exams		
3       3       Input and output data       Vector insertions       Lectures discussion       Daily exams Homework         4       3       Inserting arrays       Lectures discussion       Daily exams Homework         5       3       Methods of work with rows and columns       Lectures discussion       Homework         6       3       Install packages       package       Lectures discussion Homework         7       3       Lists and frames       Lectures discussion Homework discussion         8       3       Methods for installing menus       Lectures discussion Homework discussion Homework discussion         9       3       Import data       Data import methods       Lectures discussion Homework discussion Example Daily exams solutions Homework discussion         10       3       conducing the student to conditional statements       Lectures discussion Example Daily exams solutions Homework         11       3       If conditional statement solutions Homework       Daily exams solutions Homework         12       3       Statements       Lectures discussion Example Daily exams solutions Homework solutions Homework         13       3       If conditional statement solutions Homework solut					solutions	Homework		
Adata       Bally exams solutions       Honework Honework         4       3       Inserting arrays       Lectures Example       discussion Daily exams solutions         5       3       Methods of work with rows and columns       Lectures solutions       discussion Honework         6       3       Install packages       package       Lectures Example       discussion Example         7       3       Lists and frames       Lectures Example       discussion Baily exams solutions       Honework         8       3       Methods for installing menus       Lectures solutions       discussion Honework         9       3       Import data       Data import methods conditional statements       Lectures Honework       discussion Honework         10       3       conducing the student to conditional statements       Conditional statements for and while loop       Lectures Honework       discussion Honework         11       3       If conditional statement       Lectures Honework       discussion Honework         13       3       Student evaluation       Final exam       Lectures Honework       discussion Honework         14       3       Student evaluation       Final exam       Score of 40         III. Course Evaluation	3	3	Input and output	Vector insertions	Lectures	discussion		
4       3       Inserting arrays       Solutions       Honework         5       3       Inserting arrays       Lectures       Miscussion         5       3       Methods of work with rows and columns       Lectures       Miscussion         6       3       Install packages       package       Lectures       Miscussion         7       3       Lists and frames       Lectures       discussion         8       3       Methods for installing menus       Lectures       discussion         9       3       Import data       Data import methods       Example       Daily exams solutions         10       3       conducing the student to conditional statements       Conditional statements       Lectures       discussion discussion         11       3       If conditional statement       Lectures       discussion discussion         12       3       If conditional statement       Lectures       discussion discussion         13       3       for and while loop       Lectures       discussion discussion         14       3       Student evaluation       Final exam       Solutions       Homework         15       3       Student evaluation       Final exam       Score of 40 <td></td> <td></td> <td>data</td> <td></td> <td>Example</td> <td>Daily exams</td>			data		Example	Daily exams		
4       3       Inserting arrays       Lectures       discussion         5       3       Methods of work with rows and columns       Lectures       discussion         6       3       Install packages       package       Lectures       discussion         7       3       Lists and frames       Lectures       discussion         8       3       Methods for installing menus       Lectures       discussion         9       3       Import data       Data import methods       Lectures       discussion         10       3       conducing the student to conditional statements       Conditional statements       Lectures       discussion         11       3       Conducing the statements       If conditional statement       Lectures       discussion         12       3       Statements       If conditional statement       Lectures       discussion         13       3       Student too conditional statement       Lectures       discussion         14       3       Student evaluation       Final exam       Daily exams         3       Student to       Solutions       Homework         13       3       Statement       Lectures       discussion         14       3		-	uutu	Turnet's second	solutions	Homework		
1       3       Methods of work with rows and columns       Lectures isolutions       Homework discussion Baily exams solutions         6       3       Install packages       package       Lectures discussion Baily exams solutions       Homework discussion Baily exams solutions         7       3       Lists and frames       Lectures discussion Baily exams solutions       Homework discussion Baily exams solutions         8       3       Methods for installing menus       Lectures discussion Baily exams solutions       Homework discussion Baily exams solutions         9       3       Import data       Data import methods       Lectures discussion Baily exams solutions         10       3       conducing the student to conditional statements       Lectures discussion Baily exams solutions       Homework         11       3       If conditional statement       Lectures discussion Baily exams solutions       Homework         12       3       If conditional statement       Lectures discussion Baily exams solutions       Homework         13       3       Student evaluation       Final exam       Example Daily exams solutions       Homework         14       3       Student evaluation       Final exam       Score of 40         III Course Evaluation	4	3		Inserting arrays	Lectures	discussion		
5       3       Methods of work with rows and columns       1100000000000000000000000000000000000					solutions	Homework		
5     3     Install packages     package     Example solutions     Data system solutions       6     3     Install packages     package     Lectures     discussion Example       7     3     Lists and frames     Lectures     discussion Baily exams solutions       8     3     Methods for installing menus     Lectures     discussion Example       9     3     Import data     Data import methods     Lectures       10     3     conducing the student to conditional statements     Conditional statements     Lectures       11     3     If conditional statement     Lectures     discussion Homework       11     3     If conditional statement     Lectures baily exams solutions     discussion Homework       11     3     If conditional statement     Lectures baily exams solutions     discussion Homework       13     3     switch. statement     Example baily exams solutions     Daily exams solutions       14     3     for and while loop     Lectures Example baily exams solutions     discussion Homework       14     3     Student evaluation     Final exam     Score of 40       II. Course Evaluation	<b>-</b>	2		Methods of work with	Lectures	discussion		
6     3     Install packages     package     Lectures     discussion       7     3     Lists and frames     Lectures     discussion       8     3     Lists and frames     Lectures     discussion       8     3     Methods for installing menus     Lectures     discussion       9     3     Import data     Data import methods     Lectures     discussion       9     3     conducing the student to conditional statements     Conditional statements     Lectures     discussion       10     3     conducing the student to conditional statements     Conditional statements     Lectures     discussion       11     3     If conditional statement     Lectures     discussion       11     3     If conditional statement     Lectures     discussion       13     3     switch. statement     Lectures     discussion       14     3     for and while loop     Lectures     discussion       15     3     Student evaluation     Final exam     Daily exams solutions     Homework       15     3     Student evaluation     Final exam     Score of 40       II. Course Evaluation	5	3		rows and columns	Example	Daily exams		
6       3       Install packages       package       Lectures       discussion         7       3       Lists and frames       Lectures       discussion         7       3       Lists and frames       Lectures       discussion         8       3       Methods for installing menus       Lectures       discussion         9       3       Import data       Data import methods       Lectures       discussion         10       3       conducing the student to conditional statements       Conditional statements       Lectures       discussion         11       3       Conducing the statements       If conditional statement       Lectures       discussion         12       3       If conditional statement       Lectures       discussion         13       3       switch. statement       Lectures       discussion         14       3       for and while loop       Lectures       discussion         12       3       Student evaluation       Final exam       Daily exams         12       3       Student evaluation       Final exam       Daily exams         12       3       Student evaluation       Final exam       Daily exams         12       3       Student e				Tows and columns	solutions	Homework		
0       3       Instant packages       1       0       Example solutions       Daily exams Homework         7       3       Lists and frames       Lectures       discussion         8       3       Methods for installing menus       Lectures       discussion         9       3       Import data       Data import methods       Lectures       discussion         10       3       conducing the student to conditional statements       Conditional statements       Lectures       discussion         11       3       conditional statement       Lectures       discussion         11       3       If conditional statement       Lectures       discussion         12       3       If conditional statement       Lectures       discussion         13       3       switch, statement       Lectures       discussion         14       3       for and while loop       Lectures       discussion         14       3       Student evaluation       Final exam       Daily exams         12       3       Student evaluation       Final exam       Lectures       discussion         13       3       Student evaluation       Final exam       Solutions       Homework         15<	6	3	Install packages	package	Lectures	discussion		
73Lists and framessolutionsHomework73Lists and framesLecturesdiscussion83Methods for installing menusLecturesdiscussion93Import dataData import methodsLecturesdiscussion93Conducing the student to conditional statementsConditional statementsLecturesdiscussion103conducing the student to conditional statementsConditional statementsLecturesdiscussion113If conditional statementLectures examplediscussion Baily exams solutionsHomework113If conditional statementLectures examplediscussion Baily exams solutionsHomework123If conditional statementLectures examplediscussion Baily exams solutionsHomework133for and while loopLectures examplediscussion Baily exams solutionsHomework143for and while loopLectures examplediscussion Baily exams solutionsHomework143Student evaluationFinal examScore of 40I1. Course Evaluation- Conducting daily oral, written or applied exams on the calculator.	0	5	ilistali packages	1 0	Example	Daily exams		
7       3       Lists and frames       Lectures       discussion         8       3       Methods for installing menus       Lectures       discussion         9       3       Import data       Data import methods       Lectures       discussion         9       3       Conducing the student to conditional statements       Conditional statements       Lectures       discussion         10       3       conducing the student to conditional statements       Conditional statements       Lectures       discussion         11       3       If conditional statement       Lectures       discussion       Daily exams         11       3       If conditional statement       Lectures       discussion         12       3       If conditional statement       Lectures       discussion         13       3       switch. statement       Lectures       discussion         14       3       Student evaluation       Final exam       Daily exams         14       3       Student evaluation       Final exam       Solutions       Homework         15       3       Student evaluation       Final exam       Solutions       Homework         15       3       Student evaluation       Final exam son the calculat					solutions	Homework		
1       3       Daily exams Homework         8       3       Methods for installing menus       Lectures       discussion         9       3       Import data       Data import methods       Lectures       discussion         9       3       Import data       Data import methods       Lectures       discussion         10       3       conducing the student to conditional statements       Conditional statements       Lectures       discussion         11       3       conditional statements       If conditional statement       Lectures       discussion         11       3       If conditional statement       Lectures       discussion         11       3       If conditional statement       Lectures       discussion         13       3       switch. statement       Lectures       discussion         14       3       for and while loop       Lectures       discussion         14       3       Student evaluation       Final exam       Solutions       Homework         15       3       Student evaluation       Final exam       Score of 40         II. Course Evaluation	7	3		Lists and frames	Lectures	discussion		
83Methods for installing menusLecturesdiscussion93Import dataData import methodsLecturesdiscussion93Conducing the student to conditional statementsConditional statementsLecturesdiscussion103conducing the student to conditional statementsConditional statementsLecturesdiscussion113conducing the student to conditional statementsIf conditional statementLecturesdiscussion113If conditional statementLecturesdiscussion ExampleDaily exams solutionsHomework123If conditional statementLecturesdiscussion ExampleDaily exams solutionsHomework133switch. statementLecturesdiscussion ExampleDaily exams solutionsHomework143for and while loopLecturesdiscussion ExampleDaily exams solutionsHomework143Student evaluationFinal examScore of 40Lecturesdiscussion Example153Student evaluationFinal examScore of 40LecturesScore of 4011. Course Evaluation	,	0			Example	Daily exams		
8       3       Methods for installing menus       Lectures Example solutions       discussion Daily exams solutions         9       3       Import data       Data import methods       Lectures Example solutions       discussion Homework         10       3       conducing the student to conditional statements       Conditional statements       Lectures discussion Example solutions       Daily exams Homework         11       3       conditional statements       Lectures discussion Example solutions       Daily exams Homework         11       3       If conditional statement       Lectures discussion Example solutions       Daily exams Homework         11       3       If conditional statement       Lectures discussion Example solutions       Daily exams Homework         12       3       If conditional statement       Lectures discussion Example Solutions       Daily exams Homework         13       3       switch. statement       Lectures discussion Example Daily exams Solutions       Homework         14       3       for and while loop       Lectures discussion Example Daily exams Solutions       Homework         15       3       Student evaluation       Final exam       Score of 40         III. Course Evaluation         III. Course Evaluation					solutions	Homework		
93Import dataData import methodsExample solutionsDaily exams Homework103conducing the student to conditional statementsConditional statementsLectures Example solutionsdiscussion Daily exams Homework113conducing the statementsConditional statementsLectures Example solutionsdiscussion Homework113If conditional statementLectures Example solutionsdiscussion Homework123If conditional statementLectures Example solutionsdiscussion Homework133Ifelse conditional statementLectures Example Baily exams solutionsdiscussion Homework143for and while loop SolutionsLectures Homeworkdiscussion Baily exams solutions153Student evaluationFinal examSolutionsHomework11.Course EvaluationFinal examSolutionsHomework	8	3		Methods for installing	Lectures	discussion		
93Import dataData import methodsLectures Example solutionsHomework Daily exams Bolitons103conducing the student to conditional statementsConditional statementsLectures Example solutionsdiscussion Daily exams Homework113Conditional statementsIf conditional statementLectures Example solutionsdiscussion Homework113If conditional statementLectures Example solutionsdiscussion Homework123If conditional statementLectures Example solutionsdiscussion Homework133switch. statementLectures Example solutionsdiscussion Homework143for and while loopLectures Example solutionsdiscussion Homework153Student evaluationFinal examScore of 4011. Course Evaluation				menus	Example	Daily exams		
93Import dataData import methodsLecturesdiscussion103conducing the student to conditional statementsConditional statementsLecturesdiscussion113conditional statementsIf conditional statementLecturesdiscussion113If conditional statementLecturesdiscussion113If conditional statementLecturesdiscussion113If conditional statementLecturesdiscussion123Ifelse conditional statementLecturesdiscussion133switch. statementLecturesdiscussion143for and while loopLecturesdiscussion153Student evaluationFinal examScore of 4011. Course Evaluation- Conducting daily oral, written or applied exams on the calculator.		-			solutions	Homework		
103conducing the student to conditional statementsConditional statementsLectures Example solutionsdiscussion Daily exams Homework113conditional statementsIf conditional statementLectures Example solutionsdiscussion Daily exams Homework113If conditional statementLectures Example solutionsdiscussion Homework123If conditional statementLectures Example solutionsdiscussion Homework133Switch. statementLectures Example solutionsdiscussion Homework143for and while loop Example solutionsLectures Homeworkdiscussion Homework153Student evaluationFinal examScore of 4011. Course Evaluation- Conducting daily oral, written or applied exams on the calculator.	9	3	Import data	Data import methods	Lectures	discussion		
103conducing the student to conditional statementsConditional statementsLectures Example solutionsdiscussion Daily exams Homework113If conditional statementLectures Example solutionsdiscussion Daily exams Homework113If conditional statementLectures Example solutionsdiscussion Homework123If conditional statementLectures Example solutionsdiscussion Homework133Ifelse conditional statementLectures Example solutionsdiscussion Homework143for and while loopLectures Example solutionsdiscussion Homework153Student evaluationFinal examScore of 4011. Course Evaluation11. Course Evaluation- Conducting daily oral, written or applied exams on the calculator.					Example	Daily exams		
103Conducing the student to conditional statementsConducing the Example solutionsDaily exams Daily exams 	10	2	11	Conditional statements	Locturos	discussion		
student to conditional statements       Student to conditional statements       Solutions       Homework         11       3       If conditional statement       Lectures Example solutions       discussion Homework         12       3       Ifelse conditional statement       Lectures Example solutions       discussion Homework         13       3       switch. statement       Lectures Example solutions       discussion Homework         14       3       for and while loop       Lectures Example solutions       discussion Homework         15       3       Student evaluation       Final exam       Score of 40         11. Course Evaluation         - Conducting daily oral, written or applied exams on the calculator.	10	3	conducing the	Conditional statements	Example	Daily exams		
conditional statements       If conditional statement       Lectures       discussion         11       3       If conditional statement       Lectures       discussion         12       3       Ifelse conditional statement       Lectures       discussion         13       3       Ifelse conditional statement       Lectures       discussion         14       3       for and while loop       Lectures       discussion         14       3       for and while loop       Lectures       discussion         15       3       Student evaluation       Final exam       Score of 40         11. Course Evaluation         - Conducting daily oral, written or applied exams on the calculator.			student to		solutions	Homework		
statements       Lectures       discussion         11       3       If conditional statement       Lectures       discussion         12       3       If else conditional       Lectures       discussion         12       3       If else conditional       Lectures       discussion         13       3       If else conditional       Lectures       discussion         14       3       switch. statement       Lectures       discussion         14       3       for and while loop       Lectures       discussion         14       3       Student evaluation       Final exam       Solutions       Homework         15       3       Student evaluation       Final exams       Score of 40         II. Course Evaluation         - Conducting daily oral, written or applied exams on the calculator.			conditional		borutions	Tionic work		
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11       3       If conditional statement       Lectures       discussion         12       3       Ifelse conditional       Lectures       discussion         12       3       Ifelse conditional       Lectures       discussion         13       3       switch. statement       Example       Daily exams         14       3       switch. statement       Lectures       discussion         14       3       for and while loop       Lectures       discussion         15       3       Student evaluation       Final exam       Score of 40         11. Course Evaluation         - Conducting daily oral, written or applied exams on the calculator.			statements					
Image:	11	3		If conditional statement	Lectures	discussion		
12       3       Ifelse conditional statement       Lectures       discussion         13       3       switch. statement       Lectures       discussion         14       3       for and while loop       Lectures       discussion         15       3       Student evaluation       Final exam       Score of 40         I1. Course Evaluation         - Conducting daily oral, written or applied exams on the calculator.					Example	Daily exams		
12       3       If else conditional statement       Lectures       discussion         13       3       switch. statement       Lectures       discussion         14       3       for and while loop       Lectures       discussion         15       3       Student evaluation       Final exam       Score of 40         11. Course Evaluation         - Conducting daily oral, written or applied exams on the calculator.	4.0	-		Ifalaa aan diti anal	solutions	Homework		
Image: Statement     Example solutions     Daily exams solutions       13     3     switch. statement     Lectures     discussion       14     3     for and while loop     Lectures     discussion       15     3     Student evaluation     Final exam     Score of 40       11. Course Evaluation       - Conducting daily oral, written or applied exams on the calculator.	12	3		statement	Example	Daily avants		
13       3       switch. statement       Lectures       discussion         14       3       for and while loop       Lectures       discussion         15       3       Student evaluation       Final exam       Solutions       Homework         11.       Course Evaluation       Final exams on the calculator.				statement	solutions	Homework		
13     5     5     13     14     14     14     14     14     14     14     15     14     15     15     15     15     15     16     11     16     11     16     11     16     16     16     16     16     17     17     11     11     11     11     11     11     11     11     16     16     16     16     17     17     16     16     17     17     17     11     11     11     11     11     16     16     17 <td< td=""><td>10</td><td><b>う</b></td><td></td><td>switch, statement</td><td>Lectures</td><td>discussion</td></td<>	10	<b>う</b>		switch, statement	Lectures	discussion		
14     3     for and while loop     Lectures     discussion       14     3     for and while loop     Lectures     discussion       15     3     Student evaluation     Final exam     Score of 40       11. Course Evaluation       - Conducting daily oral, written or applied exams on the calculator.	15	3			Example	Daily exams		
14     3     for and while loop     Lectures     discussion       14     3     for and while loop     Lectures     discussion       Example     Solutions     Example     Daily exams       15     3     Student evaluation     Final exam     Score of 40       11. Course Evaluation       - Conducting daily oral, written or applied exams on the calculator.					solutions	Homework		
Image: Constraint of the second state of the seco	14	2		for and while loop	Lectures	discussion		
Image: 15 solution     Student evaluation     Final exam     Solutions     Homework       11. Course Evaluation       - Conducting daily oral, written or applied exams on the calculator.	TT	5		· ·	Example	Daily exams		
15       3       Student evaluation       Final exam       Score of 40         11. Course Evaluation         - Conducting daily oral, written or applied exams on the calculator.					solutions	Homework		
11. Course Evaluation - Conducting daily oral, written or applied exams on the calculator.	15	3	Student evaluation	Final exam		Score of 40		
- Conducting daily oral, written or applied exams on the calculator.			11.	Course Evaluation				
		- Co	onducting daily oral, wri	tten or applied exams of	on the calculato	r.		

- Conducting monthly written exams or end-of-course exams for the purpose of evaluating students.				
12. Learning and Teaching Resources				
Required textbooks (curricular books, if any)				
Main references (sources)	Muhammad Bishr Zeina 2017 (Statistical programming langu R)			
Recommended books and references				
(scientific journals, reports)				
Electronic References, Websites	Use the Internet for some examples			

1. Course Name:				
Economic statistics 1				
2. Cou	ırse Code:			
3. Seme	ster / Year:			
First semeste	r/2023-2024			
4. Description	Preparation Date:			
Wednesday	3/20/2024			
5. Available Att	endance Forms:			
Full ti	me semester			
6. Number of Credit Hours (Te	otal) / Number of Units (Total)			
	30			
7. Course administrator's name (m	nention all, if more than one name)			
Name: M.M	. Maha Hadi Abed			
Email: MAHA	.H.ABED@qu.edu.iq			
8. Course	Objectives			
Course Objectives	1- Using statistical methods and means in studyi			
	economic phenomena and activities.			
	2- Relationships between these phenomena to			
	benefit from them in determining trends of variati			
	in economic variables and controlling the value of			

		phenomenon in future time periods.		
		3- For economic planning purposes.		
	9. Teaching and Lo	earning Strategies		
Strategy	A- Knowled	ge and understanding:		
	1- Definition	n of economic statistics.		
	2-The importa	nce of economic statistics.		
	3- Identify the types of eco	nomic statistics and address problems		
	through ph	enomena and theories.		
	B- Skill obj	ectives for the subject:		
	1- Identify appropriate met	hods for economic planning purposes		
	(Teaching a	and learning methods)		
	1- Explaining the material th	eoretically, giving examples from reali		
	to link reality v	with the theoretical aspect		
	3- Graphical and math	nematical analysis of the material		
	4- Using the lect	cure and discussion method		
	5- Stimulate understanding	of the traps in the material by providir		
	SO	me examples.		
	(eval	uation methods)		
	-The student's participation in preparing and explaining the ma - Asking some questions external to the topic			
	- Duties as	signed to the student		
	-Condu	acting daily exams		

10. Course Structure							
Week	Hours	Required Learning	Unit or subject	Learning	Evaluation		
		Outcomes	name	method	method		
1	2	The concept of economic statistics	the introduction	Lecture and application us example	Discussion ar assignment		
2	2	Single record and mi length record	Price statistics	Lecture and application us example	Discussion ar assignment		
3	2	The aggregate inde and the weighted inc	Price statistics	Lecture and application us example	Discussion ar assignment		
4	2	Types of index numb and applications ir various sectors of	Price statistics	Lecture and application us example	Discussion ar assignment		

		economic statistic:						
5	2	The concept and nati	Bu	siness statistics	Lecture and	Discussion ar		
		of business statistic			application us	assignment		
		<b>X</b>			example			
6	2	Internal trade statist	I	nternal trade	Lecture and	Discussion ar		
					application us	assignment		
7	2	Foroign trado statist	Т	Foreign trade		Discussion or		
/	Z	roreign trade statist	I	roreigii traue	application us	assignment		
					example	assignment		
8	2	the first exam			enumpie			
0 0	2	The concept of natio	Na	ational income	Lecture and	Discussion ar		
9	2	income	140		application us	assignment		
		meonie			example	ussignment		
10	2	National income	Na	ational income	Lecture and	Discussion ar		
10	-	measures and pricin			application us	assignment		
		policies			example	C		
11	2	Local income and	Na	ational income	Lecture and	Discussion ar		
		national income			application us	assignment		
					example			
12	2	National income an	Na	ational income	Lecture and	Discussion ar		
		per capita income			application us	assignment		
10	2	Mothode of calculati	N	ntional incomo	L octuro and	Discussion or		
15	Z	national income	110		application us	assignment		
		national medine			example	assignment		
14	2	Solving exercises						
15	2	Second exam						
10	_	11	Cours	e Evaluation				
		11.	Cours					
The gra	ade is dis	stributed out of 100 acc	cording	to the tasks ass	signed to the stu	dent, and the		
		course gra	de is di	ivided as follow	S:			
(10) m	arka for i	1- The pursuit o	(40) (	legrees is divide	ed into:	tigination and		
(10) III	in tho cl	a number of activities:	of ropo	rts daily ovami	nations 15 mar	re for the first		
month even								
15 marks for the second month exam								
		2- 60 m	narks f	or final exam.				
	12. Learning and Teaching Resources							
Required textbooks (curricular books, if any)					None	9		
	Main	references (sources)	,	1- "Econom	nic Statistics a	nd Labor Fiel		
		()		Statistics	" Dr. Abdul L	atif Shoman		
					Baghdad 201	1		
				2. "Fcon	omic Statistic	s" Dr Abdul		
1				onne otatistit				

2- "Economic Statistics" Dr. Abdul

	Hussein Zaini, Baghdad 1990, Part On 3- "Economic Statistics" Dr. Abdul Hussein Zaini, Baghdad 1990, Part Tw
Recommended books and references	None
(scientific journals, reports)	
Electronic References, Websites	None

1.Course Name:				
Probability Distribution				
2.Course Code:				
3.Semester / Year:				
First course 2023-2024				
4. Description Preparation Date:20/3/2024				
20/3/2024				
5. Available Attendance Forms:				

	Official attendance									
	6. Number of Credit Hours (Total) / Number of Units (Total)									
	45 hours and 3 units									
	7. Course administrator's name (mention all, if more than one name)									
N	ame: A	Asst. Pr	of. Dr. Ta	ha Hussein Ali Email: T	`aha.alshaybay	wee@qu.edu.iq				
				8. Course Objectives						
Co	Course ObjectivesThe course aims to prepare the student in the basics of probability and probability theory.The student should knowthe possibility of applying the foundations of probability theory in practical.The student should knowidentifying spaces and events for phenomena									
			9. 1	eaching and Learning Stra	ategies					
Str	StrategyContinuous communication and interaction between the student ar the teacher, whether inside or outside the classroom. Encouraging cooperation among students, as learning is further enhanced when it is in a group format.									
				10. Course Structure						
Week	Hou	Re	quired	Unit or subject name	Learning	Evaluation				
	rs	Le	arning		method	method				
		Out	tcomes							
1	3	Pro dist	bability ribution	Probability distributions	Theory	General questions a discussion				
2	3	DiscreteDiscrete probability distributionTheoryOProbability3didistribution		General questions 3discussion or ily ex						
3	3			Geometric &Binomial discrete probability distributions	Theory	General questions a discussion				
4	4 3 Continuous probability distributions Uniform Theory General quest									
5	3 Continuous Continuous probability Theory Ger Probability distributions Normal			General questions a discussion						
6	3			For Gamma family continuous probability distributions	Theory	General questions discussion or dail exam				
7	3			Gamma family supplement	Theory	General questions a discussion				
8	3			Continuous Beta Dist	Theory	General questions discussion or dail exam				

9	3	Expectation	Mathematical case of discret random	expectation in the te and continuous manifolds	Theory	General questions a discussion
10	3		Using mathem to find the me	atical expectation ean and variance	Theory	General questions discussion or dail exam
11	3				Theory	General questions a discussion
12	3	Moments	Mathematic discrete ar	cal moments of nd continuous	Theory	General questions discussion or dail exam
13	3	Moment Generating Functions	Moment gene the dis	rating function in crete case	Theory	General questions a discussion
14	3		Moment gene the contine relationship b and the mor fu	ration function in uous case The etween moments nent generation nction	Theory	General questions discussion or dail exam
15	3	Final exam	Fir	nal exam	Theory	
			11. Cours	se Evaluation		
	- C	- evaluated the stu onducting daily ora Conducting monthly	dents by son l and some a y exams and	ne exercises al pplied example l final exam to	oout probabiliti s about probab evaluating stud	es. ilities. ents.
		12. Le	earning and	Teaching Rea	sources	
Req	uired te	extbooks (curricular l	books, if any)	1- Intro st 2- Moderi	duction to ma atistics, Hogg n probability t application, P	thematical & Craig. heory and its varzen
	М	ain references (sour	ces)	Introduction Ma	to probability tl ajid Hamza Al-I	heory. Dr. Abdul Nasser
Re	comme	ended books and refe	erences	All scientific j	ournals, period	icals that contain
	(scier	tific journals, reports	s)	informatio	on about statist	ical inference
	Elect	ronic References, W	ebsites	All websites specialized in probability theory		

1. Course Name:						
Survey Statistics						
2. 2. Course Code:						
3. Semester / Year:						
2023-2024						

		4. Description	Preparation Date:2	20/3/2024				
20/3/2024								
		5. Availal	ole Attendance Form	is:				
			Official attendance	e				
	6.	Number of Credit Ho	ours (Total) / Numbe	r of Units (Tot	al)			
			46 hours and 3 uni	ts				
7.	Cours	e administrator's na	me (mention all, if	more than or	ne name)			
		Name: M	ayada Jwad E	mail:	,			
		8.0	Course Objectives					
	<b>Course Objectives</b> It aims to design a questionnaire form, define the requirements for a good sample, identify and classify errors, identify non-specific errors in the stages of preparation and preparation, in the data collection stage, in the data processing stage, and publish the results, and how to design samples for some surveys.							
		9.Teaching	g and Learning Strat	egies				
St	rategy	Encouraging active and writing notes, learn and corre Encouraging cooper enhanc	learning: Students but by talking and v elated it to their pro- ration among stude ed when it is in a gi	do not learn b vriting about evious experi nts, as learnin roup format.	by listening what they ences. ng is further			
		10	.Course Structure					
Week	Hours	Required Learning	Unit or subject	Learning	Evaluation			
		Outcomes	name	method	method			
1	3	Comprehensive inventory and sample. The basic idea of sampling and estimation. Sources of data	Basic concepts	Theory	General questions and discussion			
2	3	Design of the questionnaire form, sampling frame and sampling units, advantages and disadvantages of the sample, types of samples, requirements for a good sample (bias and its causes)		Theory	General questions, 3discussion or ily exam			
3	3	Classification of errors, interrelationship between errors, importance of	A theoretical introduction to the concept of errors and	Theory	General questions and discussion			

		classifying errors, non-	their classification		
		specific errors in the census or survey stages.			
4	3	Errors in setting goals, the statistical community and the framework, coordinating and scheduling activities and possible procedural errors, reviewing and improving data collection formulas and measurement methods.	Non-specific errors in the preparation and preparation stages	Theory	General questions, discussion or daily exam
5	3	Testing alternative methods and formats Early decisions about fieldwork procedures Decisions about work methodologies	Non-specific errors in the preparation and preparation stages	Theory	General questions and discussion
6	3	Training office and field cadres for quality control in preparing and designing maps and forms of forms	Non-specific errors in the preparation and preparation stages	Theory	General questions, discussion or daily exam
7	3	Exam	Non-sample errors in the data collection stage	Theory	General questions and discussion
8	3	Coverage errors, non-response errors, response errors	Non-sample errors in the data collection stage	Theory	General questions, discussion or daily exam
9	3	Errors in the preparation stage of technical requirements for field implementation, response variation, and other variable errors	A theoretical introduction to the concept of errors and their classification	Theory	General questions and discussion
10	3	Errors in the data processing stage	Non-specific errors in the data processing stage and publishing the results	Theory	General questions, discussion or daily exam
11	3	Errors in final preparation and publication	Non-specific errors in the data processing stage and publishing the results	Theory	General questions and discussion
12	3	Introduction: Designing a sample for the 1999 Maternal and Child Mortality Survey in Iraq	Practical applications	Theory	General questions, discussion or daily exam
13	3	Designing a sample for a multiple indicator survey for the year 2000 in Iraq Designing a sample for small industrial establishments for the year 2001 in Iraq	Practical applications	Theory	General questions and discussion
14	3	Designing a sample for the	Practical applications	Theory	General

		2002 household survey in Iraq Designing a sample to				questions, discussion or		
		measure wheat crop productivity in Iraq				daily exam		
15	3	Final exam	Fi	nal exam	Theory			
	13. Course Evaluation							
	<ul> <li>Daily and mid-term tests and examinations</li> <li>Class activity and participation.</li> <li>final course exam to evaluating students.</li> </ul>							
		14. Learning	g and T	reaching Res	ources			
Rec	quired tex	tbooks (curricular books,	Sampling methods in the field of application, Arab Institute for Training a Statistical Research, Adnan Shehab Ham and Mahdi Al-Alaq, Central Bureau of					
				Statistics 2001				
	Mai	n references (sources)	1- UNITED NATIONS PUBLICATION "Designing Household Survey Samples: Practical Guidelines"New York, 2005					
Re	ecommen	ded books and reference	s					
	(scienti	fic journals, reports)						
	Electro	onic References, Website	s	All wel	bsites specialize	ed in survey		

1. Course Name:					
Linear Algebra					
2. Course Code:					
3. Semester / Year:					
Second semester 2023-2024					
4. Description Preparation Date:					
22-3-2024					
5. Available Attendance Forms:					
In class					

6. Number of Credit Hours (Total) / Number of Units (Total)							
4 hours , 3 units							
	7.Cou	se administ	trator's r	name (mention all, i	f more than c	one name)	
			Name	e: Asst. Lecturer . Ha	mida Naim		
				Email:			
				8.Course Objectives			
	Course	Obiectives		Study of matrices	and how to deal wit	th them	
		<b>,</b>		To learn about vector sp	ace and the concep	ts related to it	
			Applying	the principles of this course a	and how to use mat	rices in solving difficult	
			and com	plex equations and understa	nding the concepts r	related to methods for	
				finding the inverse of	of a matrix for all ord	lers.	
		13.	Те	aching and Learning	Strategies		
Stra	ategy	1.Continuou	ıs comm	unication and inter	action betwee	en the student an	
		the	e teacher	r, whether inside or	outside the cl	assroom.	
		2.Encour	aging co	operation among st	udents, as lea	rning is further	
			enh	anced when it is in a	a group forma	at.	
14. Course Structure							
Week	Hours	Required L	_earning	Unit or subject	Learning	Evaluation	
Week	Hours	Required L Outcor	_earning mes	Unit or subject	Learning method	Evaluation method	
Week	Hours 3	Required L Outcor Providing th with some me	Learning mes mes student eans of the	Unit or subject name Elementary operations and the inverse of	Learning method Lectures Example solutio	Evaluation method discussion Daily exams	
Week	Hours 3	Required L Outcor Providing th with some me subje	Learning mes le student eans of the ect	Unit or subject name Elementary operations and the inverse of elementary operations	Learning method Lectures Example solutio	Evaluation method discussion Daily exams Homework	
Week 1 2	Hours 3	Required L Outcor Providing th with some me subje Learn mather the mean	e student e student eans of the matically ing of	Unit or subject name Elementary operations and the inverse of elementary operations Equivalent matrices	Learning method Lectures Example solutio Lectures Example solutio	Evaluation method discussion Daily exams Homework discussion Daily exams	
Week 1 2	Hours 3	Required L Outcor Providing the with some mean subje Learn mather the mean equivalence a	e student earning mes e student eans of the ect matically ing of und how to	Unit or subject name Elementary operations and the inverse of elementary operations Equivalent matrices	Learning method Lectures Example solutio Lectures Example solutio	Evaluation method discussion Daily exams Homework discussion Daily exams Homework	
Week 1 2 3	Hours 3 3	Required L Outcor Providing th with some me subje Learn mather the mean equivalence a use i Use these for	Learning mes the student eans of the eact matically ing of and how to it rmulas to	Unit or subject name Elementary operations and the inverse of elementary operations Equivalent matrices	Learning method Lectures Example solutio Lectures Example solutio	Evaluation method discussion Daily exams Homework discussion Daily exams Homework	
Week           1           2           3	Hours 3 3 3	Required L         Outcor         Providing th         with some me         subje         Learn mather         the mean         equivalence a         use i         Use these for         find the rank of	Learning mes the student eans of the east matically ing of and how to it rmulas to of a matrix	Unit or subject         name         Elementary operations         and the inverse of         elementary operations         Equivalent matrices         Suppressive formula and         natural formula	Learning method Lectures Example solutio Lectures Example solutio Lectures Example solutio	Evaluation method discussion Daily exams Homework discussion Daily exams Homework discussion Daily exams Homework	
Week 1 2 3 4	Hours 3 3 3 3 3	Required L         Outcor         Providing th         with some meesubje         Learn mathemen         the mean         equivalence a         Use these for         find the rank of         Learn about s	Learning mes the student eans of the east matically ing of and how to it rmulas to of a matrix	Unit or subject name Elementary operations and the inverse of elementary operations Equivalent matrices Suppressive formula and natural formula Prime matrices	Learning method Lectures Example solutio Lectures Example solutio Lectures Example solutio	Evaluation method discussion Daily exams Homework discussion Daily exams Homework discussion Daily exams Homework	
Week 1 2 3 4	Hours 3 3 3 3	Required L         Outcor         Providing th         with some meaning         subje         Learn mather         the meaning         equivalence a         Use these for         find the rank of         Learn about s         of matrices and         benefit from	Learning mes e student eans of the ext matically ing of and how to it rrmulas to of a matrix some types nd how to a them in	Unit or subject name Elementary operations and the inverse of elementary operations Equivalent matrices Suppressive formula and natural formula Prime matrices	Learning method Lectures Example solution Lectures Example solution Lectures Example solution Lectures Example solution	Evaluation method discussion Daily exams Homework discussion Daily exams Homework discussion Daily exams Homework discussion Daily exams Homework	
Week 1 2 3 4	Hours 3 3 3 3	Required L         Outcor         Providing the         with some meaning         subje         Learn mather         the meaning         equivalence a         use in         Use these for         find the rank of         Learn about so         of matrices and         benefit from         other to	Learning mes te student eans of the eact matically ing of and how to it rmulas to of a matrix come types nd how to n them in opics	Unit or subject name Elementary operations and the inverse of elementary operations Equivalent matrices Suppressive formula and natural formula Prime matrices	Learning method Lectures Example solution Lectures Example solution Lectures Example solution Lectures Example solution	Evaluation method discussion Daily exams Homework discussion Daily exams Homework discussion Daily exams Homework discussion Daily exams Homework	
Week 1 2 3 4 5	Hours 3 3 3 3 3 3 3	Required L         Outcor         Providing th         with some me         subje         Learn mather         the meaning         equivalence a         use i         Use these for         find the rank of         Learn about s         of matrices and         benefit from         other to         Simplif         mathematical	Learning mes mes the student eans of the eact matically ing of and how to it rmulas to of a matrix oome types nd how to a them in opics ying operations	Unit or subject name         Elementary operations and the inverse of elementary operations         Equivalent matrices         Suppressive formula and natural formula         Prime matrices         Linear equations	Learning method Lectures Example solutio Lectures Example solutio Lectures Example solutio Lectures Example solutio	Evaluation method discussion Daily exams Homework discussion Daily exams Homework discussion Daily exams Homework discussion Daily exams Homework	
Week           1           2           3           4           5	Hours 3 3 3 3 3 3	Required L         Outcor         Providing th         with some meaning         subje         Learn mathematical         equivalence a         use i         Use these for         find the rank of         Learn about s         of matrices and         benefit from         other to         Simplify         mathematical         and how to f	Learning mes mes the student eans of the ect matically ing of and how to it rmulas to of a matrix some types nd how to a them in ppics ying operations formulate matically	Unit or subject         name         Elementary operations         and the inverse of         elementary operations         Equivalent matrices         Suppressive formula and         natural formula         Prime matrices         Linear equations	Learning method Lectures Example solutio Lectures Example solutio Lectures Example solutio Lectures Example solutio	Evaluation method discussion Daily exams Homework discussion Daily exams Homework discussion Daily exams Homework discussion Daily exams Homework	
Week 1 1 2 3 4 5 6	Hours 3 3 3 3 3 3 3 3 3 3 3	Required L         Outcor         Providing th         with some meaning         subje         Learn mather         the meaning         equivalence a         Use these for         find the rank of         Learn about se         of matrices and         benefit from         other to         Simpliff         mathematical         and how to f         them mather	Learning mes te student eans of the ect matically ing of and how to it rmulas to of a matrix come types nd how to a them in opics ying operations formulate matically ying	Unit or subject name Elementary operations and the inverse of elementary operations Equivalent matrices Suppressive formula and natural formula Prime matrices Linear equations	Learning method Lectures Example solutio Lectures Example solutio Lectures Example solutio Lectures Example solutio	Evaluation method discussion Daily exams Homework discussion Daily exams Homework discussion Daily exams Homework discussion Daily exams Homework discussion Daily exams Homework	
Week 1 1 2 3 4 5 6	Hours 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Required L         Outcor         Providing the         with some meaning         subje         Learn mather         the meaning         equivalence and         Use these for         find the rank of         Learn about so         of matrices and         benefit from         other to         Simplify         mathematical         and how to f         them mathematical         and how to f	Learning mes e student eans of the ect matically ing of and how to it rmulas to of a matrix come types nd how to a them in opics formulate matically ying operations formulate	Unit or subject         name         Elementary operations         and the inverse of         elementary operations         Equivalent matrices         Suppressive formula and         natural formula         Prime matrices         Linear equations         Methods for solving         linear equations	Learning method Lectures Example solution Lectures Example solution Lectures Example solution Lectures Example solution Lectures Example solution Lectures Example solution	Evaluation method discussion Daily exams Homework discussion Daily exams Homework discussion Daily exams Homework discussion Daily exams Homework discussion Daily exams Homework	
Week           1           2           3           4           5           6	Hours 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Required L         Outcor         Providing the         with some meaning         subje         Learn mather         the meaning         equivalence a         use i         Use these for         find the rank of         Learn about so         of matrices are         benefit from         other to         Simplify         mathematical         and how to f         them mathem         them mathem         them mathem	Learning mes le student eans of the eat matically ing of and how to it rmulas to of a matrix come types nd how to n them in opics ying operations formulate matically ying operations formulate matically in a matrix	Unit or subject         name         Elementary operations         and the inverse of         elementary operations         Equivalent matrices         Suppressive formula and         natural formula         Prime matrices         Linear equations         Methods for solving         linear equations	Learning method Lectures Example solution Lectures Example solution Lectures Example solution Lectures Example solution Lectures Example solution	Evaluation method discussion Daily exams Homework discussion Daily exams Homework discussion Daily exams Homework discussion Daily exams Homework discussion Daily exams Homework	
Week           1           2           3           4           5           6           7	Hours 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Required L         Outcor         Providing the         with some meaning         subje         Learn mather         the meaning         equivalence a         use i         Use these for         find the rank of         benefit from         other to         Simplify         mathematical         and how to f         them mather         Understa	Learning mes te student eans of the ect matically ing of and how to it rmulas to of a matrix oome types nd how to a them in opics ying operations formulate matically in a matrix nding	Unit or subject name Elementary operations and the inverse of elementary operations Equivalent matrices Suppressive formula and natural formula Prime matrices Linear equations Methods for solving linear equations	Learning method Lectures Example solution Lectures Example solution Lectures Example solution Lectures Example solution Lectures Example solution Lectures Example solution	Evaluation method discussion Daily exams Homework discussion Daily exams Homework discussion Daily exams Homework discussion Daily exams Homework discussion Daily exams Homework	

			[		Energy 1. as lot is	Dellassa
		related to the subject			Example solutio	Homework
0	C	Understanding	Sun	ported vectors	Lectures	discussion
Ø	3	mathematical concepts	Sup	ported vectors	Example solutio	Daily exams
		related to the subject			Example solutio	Homework
		j				
9	3	Simplifying	Linea	ar compositions	Lectures	discussion
,	5	mathematical operations			Example solutio	Daily exams
		and how to formulate				Homework
		them in the form of a				
		matrix	C.	1	T and man	11
10	3	How to deal with	50	ive questions	Example solution	discussion
		Teansuc Issues			Example solutio	Homework
11	C	Simplifying	F	igen values	Lectures	discussion
11	3	mathematical operations		igen values	Example solutio	Daily exams
		and how to formulate				Homework
		them in the form of a				
		matrix				
12	3	Simplifying	Li	near models	Lectures	discussion
		mathematical operations			Example solution	Daily exams
		and how to formulate				Homework
		them in the form of a				
10	2	How to deal with	So	lve questions	Lectures	discussion
15	3	realistic issues	50	ive questions	Example solutio	Daily exams
					1	Homework
14	3	Application of matrices	Conditi	onal distributions	Lectures	discussion
	0	in advanced statistical			Example solutio	Daily exams
		topics				Homework
15	3	Student evaluation	]	Final exam		Score of 40
		15.	. Cour	se Evaluation		
	- (	evaluated the students	by sor	ne exercises al	out linear algebi	ra.
	- Con	ducting daily oral and	some a	nnlied example	s about linear al	σehra
	- Co	inducting monthly ov	ame and	d final evan to	evaluating stude	onte
	- 60		anns ann		evaluating stude	
		16. Learni	ng and	I Teaching Re	sources	
Requ	uired textl	books (curricular books,	, if any)	Linear Alg	gebra / Abdel N	Majeed Hamza A
		Υ.	,	Na	isser. Lamia Ba	agir Iawad
	Main	references (sources)				
Rec	commend	ed books and reference	es			
	(scientifi	c journals, reports)				
	Electron	ic References, Website	es			
		·				

1. Course Name:	

	Differential equations							
	2. Course Code:							
				3. Seme	ster / Year:			
			First	semeste	r 2023–202	4		
			4. Desc	cription	Preparation	n Date:		
				23-3-	2024			
			5. Avai	lable Att	endance For	ms:		
				In c	ass			
		6.	Number of Credit H	Iours (To	otal) / Numb	er of Units (To	otal)	
	-		31	nours ,	1.5 units			
7.	. Coi	urs	e administrator's n	ame (m	ention all, i	t more than c	one name)	
			[ [	Name: Za	ahraa.N.kaz	em		
			Email: :	Zanraa	a.N.Kazem@	<u>equ.eau.iq</u>		
			8.	Course	Objectives			
			Course Objectives		1-1-Introducir	ng the student to the	concept of differer	
						equations		
					The most in	nportant forecasting	methods are using	
					2- Teaching th	unerential equa	of dealing with data	
					2 reaching a	e form of differential	equations.	
					3- Teaching	the student the skill	s of constructing ar	
					estim	ating differential equ	uation models	
			9. Teachir	ng and Lo	earning Stra	tegies		
Stra	itegy			1- Brain	nstorming s	strategy		
				2- Dis	scussion str	ategy		
			4	3- E-1	earning str	ategy		
			4-1	eaching	strategy wi	th examples		
			10.		Structure			
Week	Hou	rs	Required Learning	Unit c	or subject	Learning	Evaluation	
			Outcomes	n		method	method	
1		3	Introducing the student to Concept of differential	Conce equations,	pt of differential order and degree	Lectures Example solution	discussion Daily exams	
			equations, order and degre	differ	ential equations	÷	Homework	

		differential equations			
2	3	Introducing the student t	Finding differential equation	Lectures	discussion
2	5	Finding differential	by eliminating constants,	Example solution	Daily exams
		equations by eliminating	general solution and the spe	-	Homework
		constants, the general	solution for first-order		
		solution and the specicl	differential equations		
		solution for first-order	-		
		differential equations			
3	3	Introducing the student t	Separating variables, solvi	Lectures	discussion
5	5	Separating variables,	homogeneous differentia	Example solution	Daily exams
		solving homogeneous	equations	-	Homework
		differential equations	-		
4	3	Introducing the student t	Solving inhomogeneous	Lectures	discussion
Т	5	Solving	differential equations, solv	Example solution	Daily exams
		inhomogeneous	Complete differential	1	Homework
		differential equations.	equations		
		solving Complete			
		differential equations			
5	2	Using Solving incomple	Solving incomplete differer	Lectures	discussion
5	5	differential equations and	equations and the integrati	Example solution	Daily exams
		integration factor	factor	1	Homework
6	3	Introducing the student t	Solving linear differentia	Lectures	discussion
0	5	Solving linear	equations	Example solution	Daily exams
		differential equations	1	1	Homework
		Introducing the student to	Domegalli aquation	Lasturas	discussion
7	3	Demoulli equation	Bernouili equation	Example solution	Deily avoma
		Bernoulli equation		Example solution	Daily exams
		Introducing the student to	Orthogonal paths	Looturos	discussion
8	3	Orthogonal natha	Of mogonal paths	Example solution	Doily oxome
		or thogonal paths		Example solution	Homework
0	2	Introducing the student t	Homogenous and	Lectures	discussion
9	3	Homogonous and	heterogeneous equations	Example solution	Daily exams
		nonogenous anu	neterogeneous equation.	Example solution	Homework
		heterogeneous			Tionic work
		equations			
10	3	Introducing the student t	Find the general solution us	Lectures	discussion
20	Ū	Find the general solution	the discriminant equation	Example solution	Daily exams
		using the discriminant			Homework
		equation			
11	3	Introducing the student t	Find the special solution of	Lectures	discussion
		Find the special	heterogeneous differentia	Example solution	Daily exams
		solution of the	equations		Homework
		heterogeneous			
		differential			
		differential			
		equations			
12	2	Introducing the student t	Find the solution using	Lectures	discussion
12	3	Find the solution	undefined coefficients	Example solution	Daily exams
					Homework
		using undefined			
		coefficients			
12	2	Introducing the student t	Finding a solution to	Lectures	discussion
13	3		differential equations usin	Example solution	Daily exams

		Finding a solution		power series		Homework
		to differential				
		equations using				
		power series				
14	3	Introducing the student t	Appli	cations of differenti	Lectures	discussion
		Applications of different	equa	ations in the field of istration and economic	Example solution	Daily exams
		administration and econm	aumm			Homework
15	3	Student evaluation		Final exam		Score of 40
		11.	Cours	e Evaluation		
Annu	al endea	vor = daily preparatior	n and al	osences 10 mark	s + monthly ex	ams 30 = 40
		F	Final ex	am = 60		
		12. Learning	g and <sup>·</sup>	Teaching Reso	ources	
Requ	ired text	books (curricular books,	if any)			
	Main	references (sources)		Abstract Algebra, David M. Buton,		
				1988, wm. c. Brown Publishers. • The		
				Theory of Groups, Rotman I.I. 2nd.		
				1	1973. Boston.	- ,, -,
				• The Theory of Groups Macdonald		
				1968 ovford		
Baa	ommond	ad backs and reference			1 700, 0A101	u.
Rec	ommena	eu Dooks and reierence	:5			
	(scientifie	c journals, reports)				
	Electron	ic References, Website	S			

1.Course Name:						
Quality Control 2						
2.Course Code:						
3.Semester / Year:						
First semester 2023-2024						
4. Description Preparation Date:						
22-3-2024						
5. Available Attendance Forms:						
In class						
6. Number of Credit Hours (Total) / Number of Units (Total)						
3 hours , 3 units						
7. Course administrator's name (mention all, if more than one name)						

Name: Asst. Lecturer. Shada Awad Email:							
8. Course Objectives							
Course Objectives The students should understand the concept of qu					guality control and learn	about production gua	
			Line appropriate control papels to control the sublivit of production and its control production du				
			Use appropriate control panels to control the quality of production and its compliance with th				
required specifications.							
9. Teaching and Learning Strategies							
Stra	itegy	Con	inuous communication and interaction between the student and t				
			togehor whether inside or outside the classroom				
			Encouraging	cooperation among st	udents, as learni	ng is further	
				enhanced when it is in	a group format.		
10. Course Structure							
Week	Hou	rs	Required	Unit or subject name	Learning method	Evaluation	
			Learning			method	
			Outcomes				
1	1		Identify control	Control panels and advanced	Lectures	Discussion Dail	
1		-	panels	statistical techniques	Example solutions	exams	
						Homework	
2		$2^{10}$	earn about limiting	Moving average panel	Lectures	discussion	
			and continuity		Example solutions	Daily exams	
			I danstifus the	Competeix more nonel	T a stance	Homework	
3 2			derivative	Geometric mean panel	Example solutions	Doily oxome	
			derivative		Example solutions	Homework	
4 2			Get to know the	Accumulated Sum panel	Lectures	discussion	
4 Z			accumulated sum	The cumulated Sum parter	Example solutions	Daily exams	
			panel		·· · · · · · · · ·	Homework	
5 2			Identify the	Multivariate panel	Lectures	discussion	
		1	multivariate panel		Example solutions	Daily exams	
						Homework	
6 2			Learn about roll	Preview examination	Lectures	discussion	
			inspection		Example solutions	Daily exams	
			Loom about the	Individual agamination plan	Lastures	Homework	
7	2		examination plan	individual examination plan	Example solutions	Daily exams	
			examination plan		Example solutions	Homework	
Q	2		Learn about	Double screening plan	Lectures	discussion	
0			approximation		Example solutions	Daily exams	
			-		-	Homework	
9	2		Learn about the	Multi-stage examination plan	Lectures	discussion	
			examination plan		Example solutions	Daily exams	
			• • ·	<u>a</u>		Homework	
10	2		Learn about the	Sequential inspection plan	Lectures	discussion	
			examination plan		Example solutions	Daily exams	
4.4	2		earn about using	Use a hinomial distribution	Lectures	discussion	
			the binomial		Example solutions	Daily exame	
	1		une omoninai		Example solutions	Durry Crains	
		distribution				Homowork	
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10	2	Learn about the use	Lle	a hypergeometric	Lacturas	discussion	
12	2	of geometric	US	distribution	Example solutions	Daily avome	
		distribution		uisuibuuoii	Example solutions	Daily Exams	
10	0	Learn about the use	Usol	Poisson distribution	Lacturas	discussion	
13	Z	of distribution	USEI		Example solutions	Doily oxome	
		of distribution			Example solutions	Daily Exams	
1.1	0	Learn about the use	Lico	normal distribution	Lacturas	discussion	
14	2	Learn about the use	Use	normal distribution	Example solutions	Deily exema	
		distribution			Example solutions	Daily exams	
4 5				Einst compostor arom		Form of 40	
15	2	Evolution		First semester exam		Score of 40	
		students					
			11. 0	Course Evaluation	on		
	- (	Conducting daily or	ral writ	ten or annlied ex	ams on the calculator		
Conc	lucting n	onthly writton ov	$m_{c}$	d and of course of	ware for the nurnese	of avaluating	
- Conc	iucung n	ionuny written exa	ams and	i ena-or-course ex	kants for the purpose	orevaluating	
	students.						
	12. Learning and Teaching Resources						
Requir	Required textbooks (curricular books, if						
		any)					
	Main re	eferences (sources)		- Mitra,amitava,(	2008).fundamentals of	f quality control	
				and improvement. 3th ed.			
				- Montgomery douglas c (2009) Introduction to			
				- Wongomery, douglas c, (2007).Introduction to			
Statistical quality control, 6 th ed.						th ed.	
Recommended books and references							
(scientific journals, reports)							
Electronic References, Websites				All w	ebsites specialized in	Quality control	

Language program R 1
2.Course Code:
3.Semester / Year:
First semester 2023-2024
4.Description Preparation Date:
22-3-2024
5. Available Attendance Forms:
In class
6. Number of Credit Hours (Total) / Number of Units (Total)

3 hours , 3 units						
7. Course administrator's name (mention all, if more than one name)						
Name: prof. Dr. Rahim Jabbar						
Email:	Email:					
8. Course Objectives						
Course Objectives The course aims to equip t	he student with kno	wledge of the basic				
program	programming in the R language					
determine the statist	determine the statistical analysis functions in R language					
Student knowledge of built	, ing analysis and g	ranhics programs us				
		apines programs us				
	the R language					
9. Teaching and Learning Strat	egies					
Strategy Continuous communication and interaction	ion between t	he student an				
the teacher, whether inside or ou	itside the clas	sroom.				
Encouraging cooperation among stude	ents, as learni	ng is further				
enhanced when it is in a c	roun format	ing is full their				
	group for mat					
10. Course Structure						
Week Hours Required Learning Unit or subject	Learning	Evaluation				
	—					
Outcomes name	method	method				
Outcomesname13Graphics chartsPrinciple of shapes and	method Lectures	method discussion				
Outcomesname13Graphics chartsPrinciple of shapes and charts	method Lectures Example	method discussion Daily exams				
Outcomesname13Graphics chartsPrinciple of shapes and charts23Shape properties	method Lectures Example solutions	method discussion Daily exams Homework discussion				
Outcomesname13Graphics chartsPrinciple of shapes and charts23Shape properties	method Lectures Example solutions Lectures Example	discussion Daily exams Homework discussion Daily exams				
Outcomesname13Graphics chartsPrinciple of shapes and charts23Shape properties	method Lectures Example solutions Lectures Example solutions	methoddiscussionDaily examsHomeworkdiscussionDaily examsHomework				
Outcomesname13Graphics chartsPrinciple of shapes and charts23Shape propertiesImage: Charts of the state of	method Lectures Example solutions Lectures Example solutions Lectures	methoddiscussionDaily examsHomeworkdiscussionDaily examsHomeworkdiscussion				
Outcomesname13Graphics chartsPrinciple of shapes and charts23Shape properties33Draw several shapes in the same window	method Lectures Example solutions Lectures Example solutions Lectures Example	methoddiscussionDaily examsHomeworkdiscussionDaily examsHomeworkdiscussionDaily examsDaily exams				
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Outcomesname13Graphics chartsPrinciple of shapes and charts23Shape properties33Draw several shapes in the same window43Draw several side-by-side	method Lectures Example solutions Lectures Example solutions Lectures Example solutions	methoddiscussionDaily examsHomeworkdiscussionDaily examsHomeworkdiscussionDaily examsHomeworkdiscussionDaily examsHomeworkdiscussionDaily examsHomeworkdiscussionDaily exams				
Outcomesname13Graphics chartsPrinciple of shapes and charts23Shape properties33Draw several shapes in the same window43Draw several side-by-side diagrams	method Lectures Example solutions Lectures Example solutions Lectures Example solutions Lectures Example	method discussion Daily exams Homework discussion Daily exams Homework discussion Daily exams Homework discussion Daily exams				
Outcomesname13Graphics chartsPrinciple of shapes and charts23Shape properties33Draw several shapes in the same window43Draw several side-by-side diagrams	method Lectures Example solutions Lectures Example solutions Lectures Example solutions Lectures Example solutions	method discussion Daily exams Homework discussion Daily exams Homework discussion Daily exams Homework discussion Daily exams Homework				
Outcomesname13Graphics chartsPrinciple of shapes and charts23Shape properties33Draw several shapes in the same window43Draw several side-by-side diagrams53Copy graphics	method Lectures Example solutions Lectures Example solutions Lectures Example solutions Lectures Example solutions Lectures Example	methoddiscussionDaily examsHomeworkdiscussionDaily examsHomeworkdiscussionDaily examsHomeworkdiscussionDaily examsHomeworkdiscussionDaily examsHomeworkdiscussionDaily examsHomeworkdiscussionDaily examsHomeworkdiscussionDaily exams				
Outcomesname13Graphics chartsPrinciple of shapes and charts23Shape properties33Draw several shapes in the same window43Draw several side-by-side diagrams53Copy graphics	method Lectures Example solutions Lectures Example solutions Lectures Example solutions Lectures Example solutions Lectures Example solutions	methoddiscussionDaily examsHomeworkdiscussionDaily examsHomeworkdiscussionDaily examsHomeworkdiscussionDaily examsHomeworkdiscussionDaily examsHomeworkdiscussionDaily examsHomeworkdiscussionDaily examsHomeworkdiscussionDaily examsHomeworkdiscussionDaily examsHomework				
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Outcomesname13Graphics chartsPrinciple of shapes and charts23Shape properties33Draw several shapes in the same window43Draw several side-by-side diagrams53Copy graphics63Scatterplots	methodLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExampleSolutions	methoddiscussionDaily examsHomeworkdiscussionDaily examsHomeworkdiscussionDaily examsHomeworkdiscussionDaily examsHomeworkdiscussionDaily examsHomeworkdiscussionDaily examsHomeworkdiscussionDaily examsHomeworkdiscussionDaily examsHomeworkdiscussionDaily examsHomeworkdiscussionDaily exams				
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Outcomesname13Graphics chartsPrinciple of shapes and charts23Shape properties33Draw several shapes in the same window43Draw several side-by-side diagrams53Copy graphics63Scatterplots73Histogram	methodLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutions	methoddiscussionDaily examsHomeworkdiscussionDaily examsHomeworkdiscussion				
Outcomesname13Graphics chartsPrinciple of shapes and charts23Shape properties33Draw several shapes in the same window43Draw several side-by-side diagrams53Copy graphics63Scatterplots73Histogram	methodLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutions	methoddiscussionDaily examsHomeworkdiscussionDaily exams				
Outcomesname13Graphics chartsPrinciple of shapes and charts23Shape properties33Draw several shapes in the same window43Draw several side-by-side diagrams53Copy graphics63Scatterplots73Histogram	methodLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutions	methoddiscussionDaily examsHomeworkdiscussionDaily examsHomeworkdiscussionDaily examsHomeworkdiscussionDaily examsHomeworkdiscussionDaily examsHomeworkdiscussionDaily examsHomeworkdiscussionDaily examsHomeworkdiscussionDaily examsHomeworkdiscussionDaily examsHomeworkdiscussionDaily examsHomework				
Outcomesname13Graphics chartsPrinciple of shapes and charts23Shape properties33Draw several shapes in the same window43Draw several side-by-side diagrams53Copy graphics63Scatterplots73Histogram83Q-Q plot	methodLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutions	methoddiscussionDaily examsHomeworkdiscussionDaily examsHomework				
Outcomesname13Graphics chartsPrinciple of shapes and charts23Shape properties33Draw several shapes in the same window43Draw several side-by-side diagrams53Copy graphics63Scatterplots73Histogram83Q-Q plot	methodLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutions	methoddiscussionDaily examsHomeworkdiscussionDaily exams				
Outcomesname13Graphics chartsPrinciple of shapes and charts23Shape properties33Draw several shapes in the same window43Draw several side-by-side diagrams53Copy graphics63Scatterplots73Histogram83Q-Q plot	methodLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutions	methoddiscussionDaily examsHomeworkdiscussionDaily examsHomework				
Outcomesname13Graphics chartsPrinciple of shapes and charts23Shape properties33Draw several shapes in the same window43Draw several side-by-side diagrams53Copy graphics63Scatterplots73Histogram83Q-Q plot93Data generationGenerating random variables	methodLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutionsLecturesExamplesolutions	methoddiscussionDaily examsHomeworkdiscussionDaily exams				

				TF ( 1 (	T d	1
10	3	Natural tests		Tests of data	Lectures	discussion
					Example	Daily exams
					solutions	Homework
11	3	Homogeneity tests			Lectures	discussion
					Example	Daily exams
					solutions	Homework
12	3	Link application		Correlation and	Lectures	discussion
				regression	Example	Daily exams
					solutions	Homework
13	3	Regression analysis			Lectures	discussion
	-				Example	Daily exams
					solutions	Homework
14	3	Fulfilling the conditions			Lectures	discussion
	Ū	for regression			Example	Daily exams
					solutions	Homework
15	3	Student evaluation		Final exam		Score of 40
11. Cou				se Evaluation		
- Conducting daily oral, written or applied exam - Conducting monthly written exams or end-of-course exam students.					on the calculato for the purpose	r. of evaluating
12. Learning and				Teaching Reso	urces	
Requ	Required textbooks (curricular books, if any)					
Main references (sources)				Muhammad Bishr Zei	na 2017 (Statistical	programming langu
Main references (sources)				R)		
Recommended books and references						
(scientific journals, reports)						
Electronic References, Websites				Use the li	nternet for so	me examples
						<b>1</b>

1. Course Name:
Economic statistics 2
2. Course Code:
3. Semester / Year:
second semester/2024-2025
4. Description Preparation Date:
Wednesday 3/20/2024
5. Available Attendance Forms:
Full time semester
6. Number of Credit Hours (Total) / Number of Units (Total)

7. Course administrator's name (mention all, if more than one name) Name: M.M. Maha Hadi Abed Email: MAHA.H.ABED@qu.edu.iq		
	8. Course Objectives	
	Course Objectives1– Using statistical methods and means in st economic phenomena and activities. 2– Relationships between these phenomer benefit from them in determining trends of va in economic variables and controlling the valu phenomenon in future time periods. 3– For economic planning purposes.	
	9. Teaching and Learning Strategies	
Strategy	<ul> <li>1- Definition of economic statistics.</li> <li>2-The importance of economic statistics.</li> <li>3- Identify the types of economic statistics and address problet through phenomena and theories.</li> <li>B- Skill objectives for the subject:</li> <li>1- Identify appropriate methods for economic planning purpor (Teaching and learning methods)</li> <li>1- Explaining the material theoretically, giving examples from r to link reality with the theoretical aspect</li> <li>3- Graphical and mathematical analysis of the material 4- Using the lecture and discussion method</li> <li>5- Stimulate understanding of the traps in the material by prov some examples.</li> <li>(evaluation methods)</li> <li>The student's participation in preparing and explaining the material - Asking some questions external to the topic</li> <li>Duties assigned to the student</li> <li>-Conducting daily exams</li> </ul>	
	10 Course Structure	

Week	Hours	Required Learning	Unit or subject	Learning	Evaluation	
		Outcomes	name	method	method	
1	2	The concept of	the introduction	Lecture and	Discussion ar	
		agricultural statistic		application us	assignment	
2	2	Types of agricultur	Price statistics	Lecture and	Discussion ar	
۷.	Z	statistics	The statistics	application us	assignment	
		statistics		example	ussignment	
3	2	Statistical metrics for	Price statistics	Lecture and	Discussion ar	
		exploited lands		application us	assignment	
				example		
4	2	Statistical metrics fo	Price statistics	Lecture and	Discussion ar	
		exploited lands		evample	assignment	
5	2	Statistical measures	Agricultural statistic	Lecture and	Discussion ar	
5	2	change in yield per		application us	assignment	
		dunum		example	_	
6	2	Obtained lands	The index for the	Lecture and	Discussion ar	
			exploited area	application us	assignment	
	0	Company and a start		example	Discontinue	
/	Z	components of	Production efficienc	application us	Discussion ar	
		agi icultural outpu	Tatio	example	assignment	
8	2	the first exam		enumpre		
9	2	Agricultural outpu	General average yie	Lecture and	Discussion ar	
		measures	per dunum	application us	assignment	
	_			example		
10	2	Animal statistics	the introduction	Lecture and	Discussion ar	
				application us	assignment	
11	2	Statistical measures	Animal statistics	Lecture and	Discussion ar	
11	2	the number of anima		application us	assignment	
				example	0	
12	2	Statistical measures	Animal statistics	Lecture and	Discussion ar	
		animal reproductio		application us	assignment	
10	2	Mathada af using	Duine statistics	example	Diamarian	
13	2	Methods of using	Price statistics	Lecture and	Discussion ar	
		samples in censuse		example	assignment	
14	2	Solving exercises		champie		
15	2	Second exam				
10		11.	Course Evaluation			
The or	do is dia	tributed out of 100 ac	cording to the tasks as	igned to the stu	dent and the	
	course grade is divided as follows:					

1- The pursuit of (40) degrees is divided into: (10) marks for a number of activities: commitment to daily preparation, participation and activity in the classroom, preparation of reports, daily examinations. 15 marks for the first month exam. 15 marks for the second month exam. 2- 60 marks for final exam.		
12. Learning and	Teaching Resources	
Required textbooks (curricular books, if any)	None	
Main references (sources)	<ol> <li>1- "Economic Statistics and Labor Fiel Statistics" Dr. Abdul Latif Shoman, Baghdad 2011.</li> <li>2- "Economic Statistics" Dr. Abdul Hussein Zaini, Baghdad 1990, Part On 3- "Economic Statistics" Dr. Abdul Hussein Zaini, Baghdad 1990, Part Tw</li> </ol>	
Recommended books and references	None	
(scientific journals, reports)		
Electronic References, Websites	None	

#### Third stage

Course Name:
Mathematical Statistics1
Course Code:
Semester / Year:
(Fall) First 2023–20244
Description Preparation Date:
2024 / 3 /20
Available Attendance Forms:
Classroom
• Number of Credit Hours (Total) / Number of Units
(Total)
3/ 3

	<ul> <li>Course administrator's name (mention all, if more than one name)</li> </ul>					
	Name: Ahmad Naeem Flaih Email: ahmad.flaih@qu.edu.iq					
		•	Course Objectives	6		
Co	urse	Provid	ing the student with the sl density probabilit	kills of knov v functions	wing mass ar	
Obje	ctiv	• Iden	tify the types and charact	eristics of a	liscrete and	
			continuous dist	ributions.	inscrete and	
		• Ho	ow to perform random var	riable trans	formation.	
		• Teach	ing and Learning St	trategies		
	Strateg	y 1- Prov	viding concrete example	es to stude	ents in order	
		- 2- N	understand the ideas.			
		3- Us	e brainstorming to thin	k of all the	probabilitie	
			that will make the s	student ac	tive.	
	Course Structure					
Wee	Hour	Require	Unit or subject	Learni	Evaluati	
k	S	d	name	ng	on	
		Learning		metho	method	
		Outcom		d		
		es				
1	3	Probabili	1-Definition of	Black	k board	
2	3	10 understa	function	Blac	k board	
3	3	the	2-	Blac	k board	
5	distributi Bernoulli,binomial,t Black board					
6	To omial Black board Black board					

		_	-			
7	3	understa	3- Geometric and	Black board		
8	3	the	negative binomia	Black board		
9	3	distributi	4-	Black board		
10	5	То	Gamma,exponential,	Black board		
10		understa	square	Black board		
11	. 3	the	5-Normal distributi	Black board		
12	3	distributi	6-Pareto distributio	Black board		
13	3	То	7-Weibull distributi	Black board		
1/		understa	8-Discrete joint pro			
14	3	the	Dist and continuou			
15	3	distributi	joint proh Dist			
			O Some related toni			
		10	9-Some related top			
		understa	with this type of J.p.			
		the	,covariance			
		distributi	10-Conditional pro			
		То	Dis.			
		understa	11-Marginal p.d.f. (			
		the	order statistic			
		distributi	12-Joint p.d.f. of ord			
		То	statistic			
		understa	13-14 The p.d.f of			
		the	sample median an			
		distributi	range			
		Conditior	15- Exam			
		distributi				
		Condition				
		distributi				
		Ioint				
		distributio				
		Ordor				
		Statistic				
		Statistic				
		Urder				
		Statistic				
		Sample				
		median a				
		range				
		Exam				
		•	Course Evaluation			
Dail	y attend	dance = 5 +	Daily preparation = 5	+ First month exam		
	10 + Second month exam = $10 + $ End of course exam = $60$ .					
	<ul> <li>Learning and Teaching Resources</li> </ul>					
Req	uired te	xtbook				
(cur	ricular b	ooks,				

any)	
Main references	1-Mathematical Statistics. 1990. Ammer Har
(sources)	Hurmz. 2- Introduction to Mathematical Statistics 71
	Edition.
	Robert Hogg , Joseph McKean , Allen Craig
Recommended	
books and	
references	
(scientific journals,	
reports)	
Electronic Reference	youtube
Websites	

Course Name:
Mathematical Statistics2
Course Code:
Semester / Year:
(Spring) Second 2023-2024
Description Preparation Date:
2024 /3 /20
Available Attendance Forms:
Classroom
• Number of Credit Hours (Total) / Number of Units
(Total)
3/ 3
<ul> <li>Course administrator's name (mention all, if</li> </ul>
more than one name)
Name: Ahmad Naeem Flaih

Email: ahmad.flaih@qu.edu.iq					
		• Co	ourse Objecti	ves	
Cou Objec	ırse ctive	<ul> <li>Provid</li> <li>Provid</li> <li>Expl</li> <li>•</li> </ul>	ing the student v distribution of iding the skills of ain the T-distribu Explain the ce	vith introduct f sampling the f variable trar ution and F- c ntral limit the	tion about the eory. nsformation. listribution. eory.
	•	Teaching	and Learning	g Strategie	es
Strategy       1- Providing concrete examples to students in ord to understand the ideas         2- Mixing mathematics skills with statistics skill         3- Use brainstorming to think of all the possibilit that will make the student active.         • Course Structure					
Wee	Hour	Required	Unit or	Learnin	Evaluatio
k	s	Learning	subject	g	n method
		Outcomes	name	method	
1 2 3 5 6 7 8 9	3 3 3 3 3 3 3 3 3	the order statistics To understa the order statistics To understa the samplin To understa	Distribution order statist 3-Sampling theory for finding distribution 4- Transforma	Blach Blach Blach Blach Blach Blach Blach Blach Blach	<pre>     board     c board </pre>
10 11	3 3	the transforma n	n of variabl of discrete ty 5-	Black Black Black	x board x board x board

12	3	To un	dersta	Transforma	Black board	
13	3		the	n of variab	Black board	
14	3	trans	forma	of continuo	)	
15	3		n	type		
15	5	Va	riable	6-Extension	2	
		trans	forma	change o	f	
		-	n	variable		
		To un	dersta	technique	e	
			the	7 – 8 t-		
		dist	ributio	distributio	)	
		To un	dersta	9 – 10 F-		
			the	distributio	)	
		dist	ributio	11 - 12		
		To un	dersta	Compoun	q	
			the	distributio	)	
		dist	ributio	like beta	_	
		To un	dersta	binomia		
			the	gamma dis	5	
		dist	ributio	13- Limitii	n	
		To un	dersta	moment		
			the	generatin	g	
		dist	ributio	function		
		To un	dersta	14- Centra	a	
			the	limit theor	e	
		dist	ributio	15- Exan	ı	
		Liı	niting			
		gen	eratin			
		m	oment			
		Conv	vergen			
		in l	imiting			
		F	Exam			
		•	Co	urse Evalua	tion	
Daily	attenda	nce = 5	+ Dail	v preparation	n = 5 + First month ex	xam
1	0 + Seco	and $mo$	nth ex	m = 10 + En	f of course exam = 60	).
	•	Learn	ing ar	nd Teaching	Resources	
Rec	juired tex	ktbooks				
(curric	(curricular books, if a					
M	ain refere	ences	1-Ma	thematical St	atistics. 1990. Amme	r Ha
	(source	s)	<b>0</b> T	1	Hurmz.	_
	(	'	2- Int	roduction to	Mathematical Statist	ICS.
			ית		Edition.	
			Kot	oert Hogg , Jos	seph McKean , Allen (	Lrai
Rec	ommend	led				

books and	
references (scientific	
journals, reports)	
Electronic Reference	Youtube
Websites	

1. Cou	rse Name:				
Regressio	n Analysis				
2. Coi	ırse Code:				
3. Seme	ester / Year:				
The First and S	econd semester				
4. Description	Preparation Date:				
2024 /	3 / 20				
5. Available Att	5. Available Attendance Forms:				
	Weekly				
6. Number of Credit Hours (Te	otal) / Number of Units (Total)				
The total number of units is	(90), (45) credit for each semester.				
7. Course administrator's name (m	nention all, if more than one name)				
Name: Assist. I Email: hassa	Prof. Hassan S. Uraibi n.uraibi@qu.edu.iq				
8. Course	Objectives				
Course Objectives	Cognitive objectives: The student learns how t				
	estimate regression parameters, conduct hypothe				
	testing for these parameters, and test the				
	significance of the model by conducting analysis				
	variance.				

				<ul> <li>Mental obje</li> </ul>	ectives: It gives the s	tudent the ability	
				build a regression model after verifying his			
				hypotheses	and making inference	es from the resu	
				which allo	ows the student to m	ake a statistical	
					decision.		
				<ul> <li>Skill obj</li> </ul>	ectives: The student	will acquire the	
				necessary s	kill to know the exter	nt of correlation	
				data with t	he regression model	and the ability to	
				interpret r	esults and make stat	istical decisions.	
		9. Teachir	ng and Lo	earning Stra	ategies		
Stra	tegy			Brains	storming		
				• One min	ute paper		
					e feedback		
				• Note	series		
		10.	Course S	Structure			
Week	Hours	Pequired			Learning	Evaluation	
WEEK	Hours	Kequired	Unit U	Subject			
		Learning	n	ame	method	method	
		Outcomes					
(1-30)	(90)	Cognitive,	- Dec	Concept	•	Oral	
(15) W		mental and	• Des	cription of u	Brainstorn	and	
for	(45)	skillful		model		writing	
for each	(45) for	skillful	۰ł	model Regression	g	writing tests	
for each semeste	(45) for eacl	skillful	•F as	model Regression sumptions	g • One minute	writing tests	
for each semeste	(45) for each semes	n te	•F as • Le	model Regression sumptions east squares	g • One minute paper	writing tests	
for each semeste	(45) for eacl semes	skillful 1 te	•F as • Le	model Regression sumptions east squares • MLE	g • One minute paper • Real-time	writing tests	
for each semeste	(45) for each semes	) skillful 1 te	•F as • Le	model Regression sumptions east squares • MLE Variance of	g • One minute paper • Real-time feedback	writing tests	
for each semeste	(45) for eacl semes	skillful 1 te	•F as • Le • \ co	model Regression sumptions east squares • MLE Variance of pefficients Variance of	g • One minute paper • Real-time feedback • Note series	writing tests	
for each semeste	(45) for each semes	) skillful 1 te	•F as • Le •V co	model Regression sumptions east squares • MLE Variance of Defficients Variance of residuals	g • One minute paper • Real-time feedback • Note series	writing tests	
for each semeste	(45) for each semes	) skillful 1 te	• F as • Le • V co • V • Myp	model Regression sumptions east squares • MLE Variance of Defficients Variance of residuals othesis testi	g • One minute paper • Real-time feedback • Note series	writing tests	
for each semeste	(45) for each semes	skillful 1 te	•F as • Le • V co • V • M P • Hyp • Analy	model Regression sumptions east squares • MLE Variance of pefficients Variance of residuals othesis testi ysis of varian	g • One minute paper • Real-time feedback • Note series	writing tests	
for each semeste	(45) for each semes	) skillful 1 te	•F as • Le • V co • V • M • Hyp • Analy • M	model Regression sumptions east squares • MLE Variance of pefficients Variance of residuals othesis testi vsis of varian odel testing	g • One minute paper • Real-time feedback • Note series	writing tests	
for each semeste	(45) for each semes	skillful 1 te	•F as • Le •V co • V • Hyp • Analy • M • The	model Regression sumptions east squares • MLE Variance of pefficients Variance of residuals othesis testi ysis of varian odel testing coefficient of regression	g • One minute paper • Real-time feedback • Note series	writing tests	
for each semeste	(45) for each semes	skillful 1 te	•F as • Le •V co • V • Hyp • Analy • M • The det • Con	model Regression sumptions east squares • MLE Variance of pefficients Variance of residuals othesis testi ysis of varian odel testing coefficient of rermination fidence limi	g • One minute paper • Real-time feedback • Note series	writing tests	
for each semeste	(45 for each semes	skillful 1 te 11	•F as • Le •V co • V • Hyp • Analy • M • The det • Com • Course E	model Regression sumptions east squares • MLE Variance of pefficients Variance of residuals othesis testi ysis of varian odel testing coefficient of rermination fidence limi	g • One minute paper • Real-time feedback • Note series	writing tests	
for each semeste Distribu	(45) for each semes uting the s	skillful te 11 core out of 100 acc paration, daily oral	• F as • Le • V co • W • Hyp • Analy • M • The det • Con • Course E ording to • monthly	model Regression sumptions east squares • MLE Variance of pefficients Variance of residuals othesis testi vsis of varian odel testing coefficient of remination fidence limit valuation the tasks as or written of	g • One minute paper • Real-time feedback • Note series signed to the stude	writing tests ent such as	

12. Learning and	Teaching Resources
Required textbooks (curricular books, if any)	
Main references (sources)	Regression Analysis by example
Recommended books and references	
(scientific journals, reports)	
Electronic References, Websites	

			اسم المقرر (1)				
			ر : بحوث عمليات 1 –1	اسم المقر			
			1-Course Name:				
			Operations Research	1			
			2- Semester/year				
			First semester 2023-20	024			
			Date this description w	as prepared			
			22-3-2024				
_			Available attendance f	forms			
-		Numbe	In class or of study hours (total)/num	her of units (total)		_	-
		i tumoe	hours , 3uni	ts 3			-
	N	ame of the cours	e administrator (if more th	nan one name is mentioned)			
			Name: M. Afraa Abba	ns Hamada			
				@qu.edu.iq		_	-
-	The main goal is to familiarize	the student with th	e concept of the linear mod	al and the general formulas of the 1-	Ohi aatiaa		- 41-
	The main goar is to rammarize	the student with th	linear model	er and the general formulas of the 1-	Obj ective:	s (	th
	<ul> <li>2- Explaining methods for solving the linear model to reach the optimal solution facing the administration. Therefore linear programming is used. Here, it is necessary to transfer the problem from its initial state, which is represented by verbal narration of all the details of the problem, to the state of equations and inequalities that express the problem und study.</li> <li>Teaching the student the skills of dealing with model formulas and converting them from one formula to another 3-to reach the required formula for the model, as well as making the appropriate decision for decision makers to reach t optimal solution that determines the minimum objective function for the linear model.</li> </ul>						
	units, including productivity. It is	considered a renew	wable technology that increa	ses the effectiveness and improves th			
	proc	luction system, wh	Teaching and learning st	stitution.		_	_
_		Montol o			The strat		
			kiii strategy 1-		The strat	leç	
		Discussi	ion strategy 2-				
		E-learni	ing strategy 3-				
	Ec	ducation strategy v	vith illustrative examples 4-				
			Course structure				
	Evaluation method	Learning method	Unit or subject name	Required learning outcomes	Hours V	Wε	:k
	Daily discussion/exams Homework	Lectures delive Example soluti	A general introduction t operations research	Introducing the student to the concept of operations research and its historical development	3		1
	Daily discussion/exams Homework	Lectures delive Example soluti	Concept, construction and formulations of linear programming models	Introducing and explaining how build the model Linear programming formulas	3	2	

Daily discussion/exams Homework	Lectures delive Example soluti	General formulas for linear programming models	Introducing the student to the linear programming model formulas and how to build the model formulation using one of these formulas	3	63	
Daily discussion/exams Homework	Lectures delive Example solutions	Methods for solving line programming models//graphical metho	Explaining methods for solving the linear programming model using the graphical method	3	4	
Daily discussion/exams Homework	Lectures delive Example solutions	The simplified method	Steps to solve the simplified method and analyze the results	3	с.) Г.)	
		the first exam			6	
Daily discussion/exams Homework	Lectures delive Example soluti	the two-stage method	Introducing the two-stage method and demonstrating its efficiency	3	7	
Daily discussion/exams Homework	Lectures delive Example solutions	The concept of the bina problem	Introducing the student to the concept of the binary problem	3	8	
Daily discussion/exams Homework	Lectures delive Example soluti	Simplified binary metho	Introducing the student to the simplified binary method and wa to find it	3	ç	
Daily discussion/exams Homework	Lectures delive Example solutions	Changes in the right end the neckيود	Explaining the changes on the right side of the structural constraints and their impact on the solution	3	1	
	· · · · ·	Second exam			1	
Daily discussion/exams Homework	Lectures delive Example soluti	Changes in the coefficient the objective function	Explaining the changes that occu the coefficients of the objective function and explaining their imp on analyzing the results	3	1	
Daily discussion/exams Homework	Lectures delive Example soluti	Coefficients of decisior variables in constraint	Changes in the coefficients of decision variables in constraint	3	1	
Daily discussion/exams Homework	Lectures delive Example solutions	Adding a new variable o variables	The extent of the impact of addin new variable or variables	3	1	
Daily discussion/exams Homework	Lectures delive Example solutions	Adding a new restriction restrictions	Clarifying the results when adding a new constraint or constraints to the model	3		15
Annual pursuit of 40 degrees	The final exam annual en	for the first semester is an deavor of 40 marks	Student evaluation			16
		Course evaluation				
Annual endeavor	r = daily prepa	ration and absences 10 Final exam = 60	) marks + monthly exams 30 =	= 40		

ig resources
Required textbooks (methodology, if any(
Main references (sources(
Recommended supporting books and references (scientif journals, reports(
Electronic references, Internet sites

			اسم المقرر (2)				
			ر : بحوث عمليات 1 –2	اسم المقر			
			1-Course Name:				
			Operations Research	2			
			2- Semester/year				
			First semester 2023-20	024			
			Date this description w	as prepared			
			22-3-2024				
_			Available attendance f	forms			-
		Numbe	er of study hours (total)/num	ber of units (total)			
			hours , 3uni	ts 3			
-	N	ame of the cours	se administrator (if more the Name: M. Afraa Abba	nan one name is mentioned)			⊢
			Email: afraa.hamada(	@qu.edu.iq			
			Objectives of the course				
		The cognitive	objectives of the course are	:	Obj acti	ves c	th
	-Introducing the student to the im	portance of opera	tions research in helping m	anagement in making rational decisio	study	subj	ct
;	nd the essence of administrative v	vork, so managers	devote their attention to re-	aching the appropriate and correct g			
	2-Introducing the student to the tr	ansportation prob	lem and its importance in tra	ansporting goods from their processi			
	locations to the	heir requested des	stinations while achieving the	e optimal solution.			
	3-Explaining the problem of priv	atization, its chara	acteristics, and the important	ce of its application in production and			
		ir	dustrial facilities				
	1-As for the skill goals, they are:	It is considered o	ne of the scientific mathema	tical methods at the level of econom			
	units, including productivity. It is c	onsidered a renew	vable technology that increas	ses the effectiveness and improves t			
	prod	luction system. wh	nich raises the level of the ir	nstitution.			
		,,,	Teaching and learning st	rategies			⊢
		Mental s	skill strategy 1-		The st	ratec	,
		Discuss	ion strategy 2-		1110 01		
		E-learn	ing strategy 3-				
	F	ducation strategy	with illustrative examples $\Lambda_{-}$				
		ducation strategy					
			Course structure	<b>D</b> 11	**	XXX	_
	Evaluation method	Learning	Unit or subject name	Required learning outcomes	Hours	We	k
		method					
	Daily discussion/exams Homework	Lectures delive Example soluti	the transportation mod	Introducing the student to the transportation model and the	3		1
		Example soluti		importance of studying it in			
				solving the transportation			
Η	Daily discussion/exams	Lectures delive	General formula of the	problem Introducing the student to the	3	2	⊢
	Homework	Example soluti	transportation model	general formula of the	5		
				transportation model and its			
Ц				components in a mathematical			⊢

	Daily discussion/exams Homework	Lectures delive Example soluti	Methods for solving transportation mod	the lel	manner Introducing the student to ways to solve a model Transfer and explain the importance and efficiency of each method Acceptable and optimal	3	3	
	Daily discussion/exams Homework	Lectures delive Example solutions	The optimal solution transportation m	n for 10del	Finding the optimal solution for the transportation model by transportation methods	3	4	
	Daily discussion/exams Homework	Lectures delive Example solutions	Customizati form	ion	Definition of the allocation model and its role in arriving at the optimal solution to the allocation problem	3	5	
-		1	the first exam	I	L		6	
	Daily discussion/exams Homework	Lectures delive Example soluti	General forr of customization models	mat	Introducing the student to the general format of the allocation model and its components	3	7	
	Daily discussion/exams Homework	Lectures delive Example soluti	Customizati model solution	ion	Explaining ways to solve the allocation problem	3	8	
_			Second exam			<u> </u>	ç	
	Annual pursuit of 40 degrees	The final exam annual en	for the first semester is ideavor of 40 marks	an	Student evaluation			1(
		L	Course evalu	ation		I		
	Annual endeavor	r = daily prepa	ration and absence Final exam = 6	es 10 60	marks + monthly exams 30	= 40		
			Learning and teaching	g reso	urces			
					Required textbooks (methodo	ology, if any(		
	Hamdy A .Tal	ha , operations Re	esearch 2006		Main references (sou	rces(		
	Hilal Hadi Saleh - Operations Research and its Applications University of Technology 2002			Reco	ommended supporting books and re journals, reports(	ferences (scie	entif	;
					Electronic references, Inte	ernet sites		

Course Name:				
SPS	S 1			
Course Code:				
• Semes	ster / Year:			
First semester	r 2023-2024			
Description	Preparation Date:			
22-3-	2024			
Available Atte	endance Forms:			
In class and in	the laboratory			
Number of Credit Hours	(Total) / Number of Units			
(Te	otal)			
3 hours	, 2 units			
<ul> <li>Course administrator</li> </ul>	's name (mention all, if			
more than	one name)			
Name: Dr. As	aad Naser Hussian			
Email: asaad.nasir@qu.edu.iq				
Course (	Objectives			
Course Objectives	Introduce the student to how to			
	analyze statistical data, use part			
	totals of variables, change the fo			
	size and type, add a new comma			
	to the quick toolbar of the progra			
sheet, in addition to arrangi				
converting data, merging, sep				
	and selecting data, in addition t			
	grouping and weighting, countir			
	and encoding data, estimating			
	missing values			

		•	Teaching a	and Learnin	g Strategie	es
Strategy1- Brainstorming strategy 2- Discussion strategy 3- E-learning strategy						egy y y
			4- Teac	urso Struct	gy with ex	ampies
			• • •			
Week	Hou	rs	Required	Unit or	Learning	Evaluation
			Learning	subject	method	method
			Outcomes	name		
1		3	Introducing t student to Definition of spss statistic program, initialization input files	Definition of spss statistic program, initialization input files	Lectures Example solutions	discussion Daily exam Homework
2		3	Introducing t student to - Operations of variables an their attributes the data edito sheet	- Operations variables ar their attribut in the data ed sheet	Lectures Example solutions	discussion Daily exam Homework
3		3	Introducing t student to - U partial sums variables	- Use partia sums of variables	Lectures Example solutions	discussion Daily exam Homework
4		3	Introducing t student to Vie menu comman : Change the fo size, add a ne icon (comman to the standa toolbar	View ment commands Change the f size, add a n icon (comma to the standa toolbar	Lectures Example solutions	discussion Daily exam Homework
5		3	Introducing t student to - D list command	- Data list commands	Lectures Example solutions	discussion Daily exam Homework
6		3	first exam	first exam	Lectures Example solutions	discussion Daily exam Homework
7		3	Introducing t student to - Ordering dat converting variables int	- Ordering da converting variables in cases and vi versa	Lectures Example solutions	discussion Daily exam Homework

		cases and vie				
		versa		<b>K</b> C'1	Ŧ.	1
8	3	Introducing t	- N	lerge file	Lectures	discussion
		Student to -	- 2 (fm)	separatio	Example	Daily exam
		Semenation	(Irag	gmentan	solutions	Homework
		- Separation		or mes		
		(fragmentatio				
0	2	Introducing t	Do	ta collact	Locturos	discussion
9	3	student to D	- Da	alaction	Example	Daily exam
		collection	- 5	Cases	solutions	Homework
		- Selection		Cuscs	solutions	110me work
		cases				
10	3	Introducing t		- Data	Lectures	discussion
10	5	student to - D	wei	ghting, d	Example	Daily exam
		weighting, da	C	onversion	solutions	Homework
		conversion	-			
11	2	The second ex	T	he secon	Lectures	discussion
11	5			exam	Example	Daily exam
					solutions	Homework
12	3	Introducing t	Dat	a countir	Lectures	discussion
	0	student to Da	dat	a encodii	Example	Daily exam
		counting, da			solutions	Homework
		encoding				
13	3	Introducing t	r	Tabbing	Lectures	discussion
		student to	v	ariables,	Example	Daily exam
		Tabbing	a	utomatic	solutions	Homework
		variables,		coding		
		automatic cod			-	
14	3	Introducing t	Estimation		Lectures	discussion
		student to	mıs	sing valu	Example	Daily exam
		Estimation of			solutions	Homework
		missing valu	E.	1		<u> </u>
15	3	Student	F1	inai exan		Score of 40
		evaluation			Ľ	
		• Col	irse	Evalua	lion	
Annua	al endea	vor = daily pre	epara	ition and	d absences 2	10 marks +
		monthly	/ exar	ns 30 =	40	
		Fina	l exa	m = 60		
	Learning and Teaching Resources					
Requir	ed textbo	ooks (curriculai	r boo	Ba	shir, Saad	Zaghloul,
					)3). Your (	puide to the
it any)				cta	tistical nro	oram ence
				sia	tenth er	lition
	loin refe	ropooo (00000-	20)	- Nasł	wan. Imad (	2005) Scientif
	nam reie	iences (source	:5)	guid	le to Applied	Statistics 5263
Red	rommen	hed books and		fie	ld , andv , (20	13).
	Sommerie			DISCOVERING STATISTICS		

references (scientific journals, reports…)	USING IBM SPSS STATISTICS
Electronic References, Websites	All sites that contain a schedule curriculum

Course Name:			
SPSS 2			
• Cou	rse Code:		
• Semes	ster / Year:		
First semester	r 2023–2024		
Description	Preparation Date:		
22-3-	2024		
Available Atte	endance Forms:		
In class and in	the laboratory		
• Number of Credit Hours	(Total) / Number of Units		
(Te	otal)		
3 hours	, 2 units		
<ul> <li>Course administrator</li> </ul>	's name (mention all, if		
more than one name)			
Name: Dr. Asaad Naser Hussian			
Email: asaad.nasir@qu.edu.iq			
Course	Objectives		
Course Objectives	Introduce the student to how to		
	analyze statistical data, use part		
	totals of variables, change the for		
	size and type, add a new comma		
	to the quick toolbar of the progra		
	sheet, in addition to arranging a		
	converting data, merging, separat		

			and	l selecting da	ta, in addition t	
			aro	arouning and weighting countin		
			grou	grouping and weighting, counting		
				nd encoding d	lata, estimating	
				missing	values	
	•	Teaching a	and Learnin	g Strategie	es	
Stra	ategy	1-	Brainstorn	ning strate	egy	
			2- Discussio	on strategy	v	
			3- F-learnin	no strateo		
		4- Topo	bing strato	my with ox	yamplas	
		4- Teau	ining strate	gy with ex	ampies	
		• Co	urse Structi	ure		
Week	Hours	Required	Unit or	Learning	Evaluation	
		Learning	subject	method	method	
		Outcomes	name			
			Description	Lasturas	diagonacion	
1	3	introducing t	Descriptiv	Example	discussion	
		Descriptive	iterative tabl	solutions	Homework	
		statistics an		solutions	TIOMEWOIR	
		iterative tabl				
2	3	Introducing t	- Data	Lectures	discussion	
	5	student to -	exploration:	Example	Daily exam	
		Data explorati	plot diagram	solutions	Homework	
		box plot diagr	stem and le			
		and stem and	diagram			
		diagram	_			
3	3	Introducing t	- Histogran	Lectures	discussion	
		student to -	scheme	Example	Daily exam	
		Histogram,		solutions	Homework	
-		scheme		-		
4	3	Introducing t	Determine	Lectures	discussion	
		student to	Normal Q-	Example	Daily exam	
		Normal O O I	Flot diagram	solutions	nomework	
		diagram form	confidence			
		a confidence	interval th			
		interval	standard tool			
5	2	Introducing t	Trimmed	Lectures	discussion	
5	3	student to -	arithmetic me	Example	Daily exam	
		Trimmed	Springs an	solutions	Homework	
		arithmetic me	centroids			
		Springs and				
		centroids				
6	3	first exam	first exam	Lectures	discussion	
	_			Example	Daily exam	
				solutions	Homework	

7	3	Introducing t	- Ore	lering da	Lectures	discussion
,	U	student to -	cc	nverting	Example	Daily exam
		Ordering dat	var	ables in	solutions	Homework
		converting	case	s and vi		
		variables int		versa		
		cases and vie				
		versa				
8	3	Introducing t	- N	lerge file	Lectures	discussion
		student to -	- S	eparatio	Example	Daily exam
		Merge files	(frag	mentati	solutions	Homework
		- Separation		of files		
		(fragmentatio				
		of files				
9	3	Introducing t	- Dat	a collect	Lectures	discussion
		student to - D	- Se	election	Example	Daily exam
		collection		cases	solutions	Homework
		- Selection of				
1.0		cases		Deired	T a starrage	1
10	3	Introducing t	-		Lectures	discussion
		Student to -	sam		Example	Daily exam
			, ୯		solutions	Homework
			-			
11	2	The second av	Тŀ	a sacan	Locturos	discussion
11	3	The second ex	11.		Example	Doily oxom
				CXAIII	solutions	Homework
10	2	Introducing t	Pair	ad sam	Lectures	discussion
12	3	student to Pai	ТТ	≏st Oi	Example	Daily exam
		sample T Ter	Wa	v ANO\	solutions	Homework
		One Way	110	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Solution	
		ANOVA din				
13	3	Introducing t	Sin	ple line	Lectures	discussion
15	5	student to Sim	re	gression	Example	Daily exam
		linear regress		C	solutions	Homework
14	3	Introducing t	Sin	ple line	Lectures	discussion
	0	student to Sim	re	gression	Example	Daily exam
		linear regress			solutions	Homework
		lues				
15	3	Student	Fi	nal exan		Score of 40
		evaluation				
	Course Evaluation					
Annua	al endea	vor = daily pressure for a second state of the second state of t	epara	tion an	d absences	10 marks +
	monthly exams $30 = 40$					
Final exam = 60						
	Learning and Teaching Resources					
Requir	ed textbo	ooks (curricula	r boo	R	ashir Saad	Zaghloul
(2002) Vour and to the						
		if any)		(20	usj. rour	guide to the
statistical program sps					ogram spss	

	tenth edition
Main references (sources)	- Nashwan, Imad ,(2005). Scientif
()	guide to Applied Statistics 5263
Recommended books and	field , andy , (2013) .
	DISCOVERING STATISTICS
references (scientific journals,	USING
reports)	IBM SPSS STATISTICS
Electronic References. Websites	All sites that contain a schedule
,	curriculum

	Name: Huda Hamid Hadi Email: alkinanihuda26@gmail.com						
	Course Objectives						
Cours Objectiv	1. Identification of different itimes English language rul						
	2. Identification of questioning tools.						
	3. Recognizing and addressing unanswered questions						
	4. Recognition of sounds in English.						
	5. Use of external and public segments for the						
	development of reading and writing.						
	Teaching and Learning Strategies						
Strate	1. Interactive skills: Having the ability to communica with the subject teacher and colleagues.						
	2. Diagnostic skills: The possibility of speaking, listening, and speaking in English.						
	3- Analytic skills: The possibility of translating texts from English into Arabic or vice versa.						
	<ul> <li>To stimulate understanding of the involvement in the material by offering some examples from the methodological book or outside the planned book. (Methods of assessment)</li> </ul>						
	The student's involvement in the preparation and explanation of the material.						

	- Asking some outside questions about the subject. - Discussion of some subjects in English - A student's duty. - Daily exams.				
		Cours	se Structure		
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning	
				method	
		Gain knowledge from t course	tenses Short answers	Lecture, discussio dialogue, and interrogation, usin data + the blackboard	
		Gain knowledge from t course	Simple present	Lecture, discussio dialogue, and interrogation, usio data + the blackboard	
	4	Gain knowledge from t course	Sports	Data + blackboa	
	4	Gain knowledge from t course	-Simple past tense - The opinion	Data + blackboa	
	e	Gain knowledge from t course	offer opinion	Data + blackboa	

:	Gain knowledge from t course	future tense	Data + blackboa
8	Gain knowledge from t course	Symbols and sound: Verb parts	Lecture, discussic dialogue, and interrogation, usir data + the blackboard
ç	Gain knowledge from t course	Present perfect ten	Data + blackboai
1	Gain knowledge from t course	adjectves Suggestions	Data + blackboa
11	Gain knowledge from t course	Ability Action	Data + blackboa
12	Gain knowledge from t course	Present perfect continuous tense	Data + blackboa

1		Direct questions	Data + blackboa				
1	Gain knowledge from t course	Reported speech	Data + blackboai				
13	Gain knowledge from t Course	Review the tenses Review some exercises - Book review -Solve exercises an practice them	Lecture, discussion dialogue, and interrogation, usin data + the blackboard				
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							

Learning and Teaching Resources					
Required textbooks (curricular books,	-intermediate student boo				
any)	new neadway				
Main references (sources)					
Recommended books and references					
(scientific journals, reports)					
Electronic References, Websites	HYPERLINK				
	ps://elt.oup.com/catalogue/items/global				
	ult_courses/new_headway/elementary				
	_fourth_				
	<pre>ilt_courses/new_headway/elementary_</pre>				
	fourth_edition/97801947				

Course Name:
biostatistics 1
Course Code:
Semester / Year:
First semester 2023-2024
Description Preparation Date:
22-3-2024

Available Attendance Forms:								
In class								
Number of Credit Hours (Total) / Number of Units (Total)								
	2 hours , 2 units							
Οοι	irse	ad	ministrator's	s nam	e (n	nention all	, if more	
			than	one n	ame	e)		
			Name:ast-	prof.	Dr. f	, adel hamio	d hadi	
			Email: fa	idel al	husi	nv@au ed	u ia	
			Linan. ia	lucial	nusi	nyequicu	unq	
			Course	e Obje	ective	es		
	С	our	se Objectives			Introduci	ng the student	
						4 <b>1</b> e e	and af	
						the		
						biost	atistics, The	
						most imr	ortant statistic	
						testi	ng methods.	
							8	
					2-T	eaching the	student skills f	
						dea	ling	
						With sha	red data.	
						skills of building		
						SKIIIS	s of building	
various statistical h					stical hypothes			
		Т	eaching and	Learn	ina S	Strategies		
		-	<u> </u>	Ducin	-			
Stra	ategy		1- Brainstorming strategy				egy	
			2	2 - DISC	ussi.	onstrateg	у	
				5- E-I€ ₁ ·		ng strateg	y ,	
		4- Teaching strategy with examples						
Course Structure								
Week	Hou	rs	Required	Unit	or	Learning	Evaluation	
			Learning	subi	iect method		method	
			Outcomes	nan	ne			
1		2	Introducing t	Metr	tics A	Lectures	discussion	
		Z	student Metri	the d	ata is	Example	Daily exam	
			And the data is	Bios	tatisti	solutions	Homework	
			Biostatistics					
2		2	Introducing t	avera	iges a	Lectures	discussion	
			student to da	m	etrics	Example	Homework	
			metrics			solutions	TOHEWOR	
L			metrics					

3	2	Introducing tl	Event,	Lectures	discussion
		student Even	probability :	Example	Daily exam
		probability ar	condition	solutions	Homework
		conditional	probabilit		
		probability			
4	2	Introducing t	Importan	Lectures	discussion
		student to	discrete	Example	Daily exam
		Important disci	distribution	solutions	Homework
		distributions	the biologic		
		the biologica	field		
		field (Dinemial	(Binomia		
		(Binomial,	Poisson		
-	0	Poisson ous	Continuou	Lasturas	diaguasian
5	2	distributions T	distribution	Example	Doily or or
		tools in the field	The test in	Example	Daily exam
		Biostatistics	field	solutions	Homework
		Gernonontio	Piostotisti		
		(exponentia	biostatisti		
		normal	distributio		
		distribution	normal		
		uistituutoli	distributio		
(	2	Introducing t	Biostatisti	Lectures	discussion
0	Z	student	application	Example	Daily exam
		Biostatistics	For probabi	solutions	Homework
		applications F	distribution	solutions	Homework
		probability	uistributio		
		distribution			
7	2	Introducing t	Types of	Lectures	discussion
,	2	student Types	incorrect	Example	Daily exam
		incorrect	hypothese	solutions	Homework
		hypotheses	Standard		
		Standard			
8	2	Introducing t	Test of	Lectures	discussion
-		student Test	averages, to	Example	Daily exam
		averages, tes	Sample un	solutions	Homework
		Sample unit			
9	2	Introducing t	Two samp	Lectures	discussion
		student	test	Example	Daily exam
		to Two samp		solutions	Homework
		test			
10	2	one way	one way	Lectures	discussion
		analysis of	analysis o	Example	Daily exam
		variance	variance	solutions	Homework
11	2	Introducing t	two way	Lectures	discussion
		student to	analysis o	Example	Daily exam
		two way	variance	solutions	Homework
		analysis of			
		variance			
12	2	Introducing t	multiple	Lectures	discussion
		student to	compariso	Example	Daily exam

		multiple comparison			solutions	Homework	
13	2	Introducing t	var	iance te	Lectures	discussion	
		student to			Example	Daily exam	
		variance test			solutions	Homework	
14	2	Biostatistics	Bi	ostatisti	Lectures	discussion	
		applications	ap	plication	Example	Daily exam	
					solutions	Homework	
15	2	Student evaluation	Fi	inal exar		Score of 40	
		Cour	rse	Evalua	tion		
Annua	Annual endeavor = daily preparation and absences 10 marks + monthly exams 30 = 40 Final exam = 60						
Learning and Teaching Resources						S	
Requir	Required textbooks (curricular boo						
		if any)					
Ν	lain refe	rences (sources	5)	Sokal, R. R., & Rohlf, F. J. (1987 Biostatistics. <i>Francise &amp; Co, Nev</i> <i>York</i> , 10.			
Recommended books and				Pagano, M., Gauvreau, K., & Mattie H. (2022) <i>Principles</i>			
references (scientific journals,			,	of biostatistics. Chapman and			
reports)				Hall/CRC	х 7 -		
Daniel, W. W., & Cross, C. L. (2018). <i>Biostatistics: a foundation</i> <i>for analysis in the health</i> <i>sciences.</i> Wiley							
Elec	tronic Re	eferences, Webs					

Course Name:				
biostatistics 2				
Course	Code:			
Semester	· / Year:			
second semeste	er 2023-2024			
Description Pre	paration Date:			
22-3-	2024			
Available Attend	ance Forms:			
In cl	ass			
Number of Credit Hours (Total)	/ Number of Units (Total)			
2 hours , 2 units				
Course administrator's name (mention all, if more				
than one r	name)			
Name:ast- prof.	Dr. fadel hamid hadi			
Email: fadel.al	lhusiny@qu.edu.iq			
Course Obje	ectives			
Course Objectives	Introducing the student			
	the concept of			
	biostatistics, The			
	most important statistic			
	testing methods.			
	2-Teaching the student skills f dealing			
	with shared data.			
	Teaching the student t			
	skills of building			
	various statistical hypothe			
Teaching and Learning Strategies				

Strategy		1- Brainstorming strategy						
			2	у				
		3- E-learning strategy						
		4- Teaching strategy with examples						
Course Structure								
Week	Hou	rs	Required	Unit or	Learning	Evaluation		
			Learning	subject	method	method		
			Outcomes	name				
1		2	Introducing t	Measures te	Lectures	discussion		
1		-	student Measu	proportions	Example	Daily exam		
			tests proportio	correlatior	solutions	Homework		
			and correlatio					
2		2	Introducing the	Sign test	Lectures	discussion		
_		-	student to	_	Example	Daily exam		
			data Sign tes		solutions	Homework		
3		2	Introducing t	Wilcoxon ra	Lectures	discussion		
			student	test	Example	Daily exam		
			Wilcoxon ra		solutions	Homework		
			test					
4		2	Introducing t	Wilcoxon ra	Lectures	discussion		
Т		2	student to	sum test	Example	Daily exam		
			Wilcoxon ra		solutions	Homework		
			sum test					
Б		2	Kruskal-We	Kruskal-We	Lectures	discussion		
5		2	test for	test for	Example	Daily exam		
			nonparametr	nonparamet	solutions	Homework		
			multiple	multiple				
			muniple	compariso				
		2		The advante	Lasturas	diaguasian		
6		Ζ	Introducing t	The advanta	Example	Doily or or		
			student	01 nonnaramat	solutions	Homework		
			The advanta	tests	solutions	TIOTIC WOIR		
			of	10515				
			nonparametr					
			tests					
7		2	Introducing t	Chi-squar	Lectures	discussion		
			student	test	Example	Daily exam		
			Ch1-square te		solutions	Homework		
8		2	Introducing t	Numrise te	Lectures	discussion		
			student Tes		Example	Daily exam		
			Numrise		solutions	Homework		
			test	~				
9		2	Introducing the	Singular	Lectures	discussion		
			student	proportions	Example	Daily exam		
			to Singular		solutions	Homework		
			proportions te					
10	2	Berkson-Falc	Berl	kson-Fal	Lectures	discussion		
-------------------------------------	---------------------------------	------------------	----------	-------------------------	-----------------	------------------		
		test		test	Example	Daily exam		
					solutions	Homework		
11	2	Introducing t	Es	timate th	Lectures	discussion		
		student to	ave	erage do	Example	Daily exam		
		Estimate the			solutions	Homework		
		average						
		dose						
12	2	Determine tl	Det	ermine	Lectures	discussion		
	-	mediator do	me	diator de	Example	Daily exam		
		by drawing	by	v drawin	solutions	Homework		
13	2	Introducing t	C	onfidenc	Lectures	discussion		
15	2	student to	inte	rval for	Example	Daily exam		
		Conf	me	dian do	solutions	Homework		
		idence						
		interval for						
		the median						
		dose						
1.4	า	Logistic	T	ogistic	Lectures	discussion		
14	Z	ragrassion	1		Example	Daily exam		
		Case stades	re	gressio	solutions	Homework		
		Case study		ase stud	solutions			
15	2	Student	F1	nal exar		Score of 40		
	evaluation							
		Cou	rse l	Evalua	tion			
Annua	al endea	vor = daily pre	para	tion an	d absences 1	10 marks +		
		monthly	exan	ns 30 =	40			
		Final	exai	n = 60				
		Learning and	d To	achino		c		
				acrimy		3		
Requir	ed textbo	ooks (curricular	boo		Hoerraing	), VV. (1994). A		
		if any)			non-para	ametric test of		
		ii airy)				Norks of Mas		
					Hooffdi	na 21/-226		
		,	`	Siega		Nonnarametr		
N	lain rete	rences (source	s)	statistics The American				
					Statistician 1	1(3) 13-19		
				C		/(0), 10 10.		
				Kruskal W/ H (2017) A				
			nonpa	arametric tes	t for the seve			
				sam	ple problem.	The Annals o		
			Math	ematical Sta	tistics, 525-54			
Re	commen	ded books and						
refer	references (scientific journals							
	ren	orts)	-,					
Den		8 Croop C 1						
(2019)		., & CIUSS, C. L	 tion					
(2018). Biostatistics: a foundation								

for analysis in the health sciences. Wiley	
Electronic References, Websites	

	Course Name:					
	Demographic analysis/1					
	Course Code:					
	Semester / Year:					
Firs	st semester of the year 2023-2024					
	<ul> <li>Description Preparation Date:</li> </ul>					
	20/3/2024					
	Available Attendance Forms:					
	Classrooms, In-person study hall					
Number	r of Credit Hours (Total) / Number of Units					
	(Total)					
	/30/units2					
Cours	se administrator's name (mention all, if					
	more than one name)					
Nan	ne: Assistant teacher Sanaa Jabbar Tohme					
	Email: SANAA.J.TUAMA@qu.edu.iq					
	Course Objectives					
Course Objectiv	<ul> <li>Enable the student to know the nature of</li> </ul>					
	demographic analysis from an academic and					
	professional perspective					

		The object	ctives of its stu	dy and the t	heoretical and	
	conceptual dimension of demographic analysis					
			through ur	nderstanding	I	
		The nature	of the statistic	ian's work	Based on sta	
	and local statistical standards					
	<ul> <li>Developing their awareness of population statist</li> </ul>					
		the	eir importance,	types and st	ages of	
		Teeshier	examinatio	on	-	
			and Learning	g Strategie	S	
Stra	ategy	*Enabling	the student	to learn th	ie types of	
		the entity in	allalySIS Da	seu on the the work	and how t	
		the churcy m	coope	rate		
		With the	Central Bur	eau of Stat	tistics by	
		examining	g the popula	tion censu	ıs system	
		through the	stages of its	impleme	ntation and	
			program	design		
		* Active par	ticipation be	etween pr	ofessor and	
		stude	nt in manag	ing the lec	cture.	
			_	_		
		• Co	ourse Structu	re		
Wee	Hour	Required	Unit or	Learning	Evaluatio	
k	s	Learning	subject	method	n method	
		Outcomes	name			
1	2	The	Introductio	Theoreti	Discussio	
		student	n to	cal:	n and	
		gains	population	Viewed	questions	
					questions	
		experience	statistics	using a	questions	
		experience and	statistics	using a data	questions	
		experience and knowledge	statistics	using a data show	questions	
		experience and knowledge about the	statistics	using a data show device	questions	
		experience and knowledge about the concept of	statistics	using a data show device	questions	

		statistics			
2	2	The	The nature	Theoreti	Class
		student	of	cal:	assignme
		gains	demograph	Viewed	nts
		experience	ic	using a	
		and	information	data	
		knowledge	•	display	
		about the		device	
		nature of			
		demograph			
		ic			
		information			
3	2	The	Data	Theoreti	Discussio
		student	collection	cal:	n and
		gains	methods	Viewed	questions
		experience		using a	
		and		data	
		knowledge		display	
		about data		device	
		collection			
		methods			
4	2	The	Data and	Theoreti	Class
		student	information	cal:	assignme
		gains	available	Viewed	nts
		experience	from	using a	
		and	United	data	
		knowledge	Nations	display	
		about	offices,	device	
		statistical	some		
		measures	statistical		
			measures.		
5	2		the first		
			exam		

6	2	The	Population	Theoreti	Participat
		student	growth	cal:	ion in the
		gains	rates,	Viewed	lecture
		experience	population	using a	
		and	dynamics	data	
		knowledge	and	display	
		about the	analysis	device	
		concept of	methods,		
		population	crude rates		
		growth			
7	2	The	Cross-	Theoreti	Participat
		student	sectional	cal:	ion in the
		gains	and	Viewed	lecture
		experience	longitudinal	using a	
		and	fertility	data	
		knowledge	rates	display	
		about		device	
		fertility			
		rates			
8	2	The	Fertility	Theoreti	Class
		student	measures	cal:	assignme
		gains		Viewed	nts
		experience		using a	
		and		data	
		knowledge		display	
		about		device	
		fertility			
		measures			
9	2	The	Fertility	Theoreti	Class
		student	rates and	cal:	assignme
		gains	population	Viewed	nts
		experience	characterist	using a	
		and	ics	data	

		knowledge		display	
		about		device	
		population			
		characterist			
		ics			
10	2	The	Cross-	Theoreti	Participat
		student	sectional	cal:	ion in the
		gains	mortality	Viewed	lecture
		experience	rates	using a	
		and		data	
		knowledge		display	
		about		device	
		mortality			
		rates			
11	2		Second		
			exam		
12	2	The	The life	Theoreti	Discussio
		student	span	cal:	n and
		gains		Viewed	questions
		experience		using a	
		and		data	
		knowledge		display	
		about life		device	
		expectancy			
13	2	The	Configure a	Theoreti	Daily
		student	life table	cal:	exam
		gains		Viewed	
		experience		using a	
		and		data	
		knowledge		display	
		of the		device	
		component			
		s of the life			

		table					
14	2	The	Exa	mples	Theoreti	Discussio	
		student	of	a life	cal:	n and	
		gains	ta	able	Viewed	questions	
		experience			using a	-	
		to create a			data		
		life			display		
		schedule			device		
15	2	Sonedale	F	iret			
15	2			notor			
			Sen	lester			
			e	xam			
	<u> </u>	• Co	urse	Evaluat	ion		
Distril	Distributing the score out of 100 according to the tasks assigned						
to the	to the student such as daily preparation, daily oral, monthly, or					nonthly, or	
	written exams, reports etc						
Туј	pe of as	signment for t	he	The de	egree grante	ed to him	
Pı	ractical	and theoretica	al		10		
assig	gnments	s, daily exams,	and				
st	tudent p	participation in	1				
	the	first exam			15		
	Sec	ond exam			15		
	fir	nal exam			60		
	То	tal score					
	•	Learning a	nd Te	aching	Resources	6	
Requir	ed text	ooks (curricula	ar bool	« 1. Th	1. The methodological bo		
		any)		pres	prescribed by the Minist		
				1 TO	ligher Edi	lication and	
	Main ro	ferences (cour	205)	Th	hook (D	amography	
		101000 (SUUI	.es)	Anz	alvsis and	Models) h	
			Loui	s Henry, t	ranslated l		
				Mada S	harifi		
Re	ecomme	ended books ar	nd			/	
refe	rences	(scientific journ	als,				
	re	ports)					

Electronic References, Websites	/

	13. Course Name:					
	Demographic analysis/2					
	14. Course Code:					
	15. Semester / Year:					
	First semester of the year 2023-2024					
	16. Description Preparation Date:					
	20/3/2024					
	17. Available Attendance Forms:					
	Classrooms, In-person study hall					
	18.Number of Credit Hours (Total) / Number of Units (Total)					
	/30/units2					
19.	Course administrator's name (mention all, if more than one					
	name)					
	Name: Assistant teacher Sanaa Jabbar Tohme					
	Email: SANAA.J.TUAMA@qu.edu.iq					
	20. Course Objectives					
Course	• Enable the student to know the nature of demographic analysis from an academic and					
Objective	professional perspective					
	The objectives of its study and the theoretical and conceptual dimension of					
	demographic analysis through understanding					
	The nature of the statistician's work Based on state and local statistical standards					
	• • Developing their awareness of migration rates and rates, learning, labor					
	force and industry, method					
	Forward migration, reverse migration method and Sprague rates…					
	21. Teaching and Learning Strategies					
Strategy	*Enabling the student to learn the types of demographic analysis					
	based on the specialty of the entity implementing the work and ho					
	to cooperate					
	With the Central Bureau of Statistics by examining the population					
	census system through the stages of its implementation and progra					
	designStatistics.					
	* Active participation between professor and student in managing t					
	lecture.					

22. Course Structure							
Week	Hours	Required Learning	Unit or subject	Learning	Evaluation		
		Outcomes	name	method	method		
1	2	The student gains	Migration rates and	Theoretical:	Discussion		
		experience and	rates	Viewed	and		
		knowledge about		using a data	questions		
		migration ratios		show device			
		and rates					
2	2	The student gains	Marriage and	Theoretical:	Class		
		experience and	divorce	Viewed	assignments		
		knowledge about		using a data			
		the rates of		display			
		marriage and		device			
		divorce					
3	2	The student gains	Learning, workforce	Theoretical:	Discussion		
		experience and	and industry	Viewed	and		
		knowledge about		using a data	questions		
		learning, the		display			
		workforce and		device			
		industry					
4	2	Learning,	Statistical	Theoretical:	Class		
		Workforce and	measures about	Viewed	assignments		
		Industry: The	birth miscarriage	using a data			
		student gains	rates	display			
		experience and		device			
		knowledge about					
		statistical					
		measures of birth					
		miscarriage rates					
5	2		the first exam				
6	2	The student gains	Synthetic method	Theoretical:	Participation		
		experience and		Viewed	in the		
		knowledge about		using a data	lecture		

Image: synthetic methoddisplay devicedisplay device72The student gains experience and experience and methodTheoretical:Participation in the using a data display device82The student gains experience and migration methodReverse migration methodViewed device82The student gains experience and methodNiewed deviceClass82The student gains experience and methodMieoretical:Class92The student gains experience and methodMieoretical:Class92The student gains experience and how to prolong marriageTheoretical:Class102The student gains experience and how to prolong experience and how to prolong experience and how to prolong marriageSprague ratesTheoretical:Participation in the using a data display device112The student gains experience and knowledge aboutSprague ratesViewed using a data display deviceIecture112The student gains experience and knowledge aboutSprague ratesViewed using a data display deviceIecture112Increase experience and knowledge aboutSecond examTheoretical:Discussion and display device122Increase knowledgereview of the subject's vocabulary deviceTheoretical:Discussion and display device132Increase knowledgeViewed using a data display deviceDialy exam142Increase knowledge <th></th> <th>-</th> <th></th> <th></th> <th></th> <th></th>		-				
Image: spectrame spe			the synthetic		display	
7       2       The student gains experience and knowledge about       Forward migration method       Theoretical: wising a data display       Participation in the lecture         8       2       The student gains experience and knowledge about       Reverse migration method       Theoretical: Viewed       Class assignments         8       2       The student gains experience and knowledge about       Reverse migration method       Theoretical: Viewed       Class assignments         9       2       The student gains experience and knowledge about       How to prolong migration method       Theoretical: Viewed       Class assignments         9       2       The student gains experience and knowledge about       How to prolong marriage       Theoretical: Viewed       Participation assignments         10       2       The student gains experience and knowledge about       Sprague rates       Theoretical: Viewed       Participation in the using a data         11       2       Increase knowledge       A comprehensive review of the subject's       Theoretical: Viewed       Discussion         11       2       Increase knowledge       A comprehensive review of the subject's       Theoretical: Viewed       Daily exam         11       2       Increase knowledge       A comprehensive review of the subject's       Theoretical: Viewed       Daily exam         13			method		device	
experience and knowledge about the forward migration methodmethodViewed using a data display devicein the lecture82The student gains experience and knowledge about the reverseReverse migration methodTheoretical: Uswed using a data display deviceClass assignments using a data display device92The student gains experience and knowledge about the reverse experience and knowledge aboutHow to prolong marriageTheoretical: Uswed using a data display deviceClass assignments assignments92The student gains experience and knowledge about how to prolong marriageHow to prolong deviceTheoretical: Uswed using a data display deviceParticipation in the lecture102The student gains experience and knowledge about bow to prolong experience and knowledge aboutSprague ratesTheoretical: Uswed using a data display device112Second examUsing a data using a data display deviceDaily exam132Increase knowledgeA comprehensive vocabularyTheoretical: using a data d	7	2	The student gains	Forward migration	Theoretical:	Participation
knowledge about the forward migration methodusing a data display devicelecture82The student gains experience and knowledge about the reverse migration methodReverse migration methodTheoretical: Uiewed using a data display deviceClass assignments92The student gains experience and migration methodHow to prolong marriageTheoretical: Uiewed using a data displayClass assignments92The student gains experience and knowledge about how to prolong marriageHow to prolong marriageTheoretical: Uiewed using a data display deviceClass assignments assignments102The student gains experience and knowledge about bow to prolong marriageSprague ratesTheoretical: Uiewed deviceParticipation in the using a data display device102The student gains experience and knowledge about Sprague ratiosSprague ratesTheoretical: Uiewed deviceParticipation in the using a data display device112Increase knowledgeA comprehensive review of the subject's vocabularyTheoretical: display deviceDiscussion132Increase knowledgeInterestical: using a data display deviceDaily exam142Increase knowledgeTheoretical: using a data display deviceDaily exam142Interestical: knowledgeTheoretical: knowledgeDiscussion device <th></th> <th></th> <th>experience and</th> <th>method</th> <th>Viewed</th> <th>in the</th>			experience and	method	Viewed	in the
Image: base in the forward migration methoddisplay device82The student gains experience and knowledge aboutReverse migration methodTheoretical:Class assignments82The student gains experience and knowledge aboutmethodUsing a dataSignay device92The student gains experience and knowledge aboutHow to prolongTheoretical:Class assignments92The student gains experience and knowledge aboutMawriageViewedassignments92The student gains experience and knowledge aboutMawriageViewedassignments102The student gains experience and knowledge aboutSprague ratesTheoretical:Participation102The student gains experience and knowledge aboutSprague ratesTheoretical:Participation112IncreaseA comprehensiveMewiceIncreaseSignay112IncreaseA comprehensiveViewedand112IncreaseA comprehensiveViewedand132IncreaseNooledularydeviceDaily exam132IncreaseIncreaseViewedusing a data142IncreaseIncreaseViewedusing a data142IncreaseIncreaseViewedusing a data142IncreaseIncreaseViewedusing a data142IncreaseIncreaseViewedusing a data <th></th> <th></th> <th>knowledge about</th> <th></th> <th>using a data</th> <th>lecture</th>			knowledge about		using a data	lecture
initial experience and experience and knowledge aboutReverse migration methodTheoretical: Viewed using a data displayClass assignments92The student gains migration methodHow to prolong marriageTheoretical: Viewed using a dataClass assignments92The student gains experience and how to prolong marriageHow to prolong marriageTheoretical: viewed displayClass assignments102The student gains experience and how to prolong marriageSprague ratesTheoretical: viewed deviceParticipation in the lecture102The student gains experience and knowledge aboutSprague ratesTheoretical: viewed deviceParticipation in the lecture112Sprague ratiosSprague ratesTheoretical: using a data display deviceDiscussion and112Increase knowledgeA comprehensive review of the vocabularyNiewed display deviceDiscussion and questions132Increase knowledgeA comprehensive review of the viewed using a data displayDialy exam Viewed device132Increase knowledgeTheoretical: displayDialy exam Viewed device142Increase knowledgeTheoretical: knowledgeDiscussion device			the forward		display	
8       2       The student gains experience and knowledge about       Reverse migration method       The oretical: Viewed display       assignments assignments         9       2       The student gains experience and knowledge about       How to prolong marriage       Theoretical: Viewed display       Class assignments         9       2       The student gains experience and how to prolong marriage       How to prolong device       Theoretical: using a data       Class assignments         10       2       The student gains experience and knowledge about       Sprague rates       Theoretical: Using a data       Participation in the lecture         10       2       The student gains experience and knowledge about       Sprague rates       Theoretical: Viewed       Participation in the lecture         11       2       Increase knowledge       A comprehensive review of the subject's       Discussion and questions         13       2       Increase knowledge       A comprehensive review of the subject's       Theoretical: Using a data       Daily exam Viewed using a data         13       2       Increase knowledge       Freview of the subject's       Viewed using a data       Daily exam         14       2       Increase knowledge       Increase knowledge       Theoretical: knowledge       Daily exam			migration method		device	
experience and knowledge about the reverse migration methodmethodViewed using a data displayassignments display92The student gains experience and how to prolong marriageHow to prolong marriageTheoretical: Uiewed deviceClass assignments assignments102The student gains experience and how to prolong marriageSprague ratesTheoretical: UiewedParticipation in the using a data device102The student gains experience and knowledge aboutSprague ratesTheoretical: UiewedParticipation in the using a data device112The student gains experience and knowledge aboutSecond examTheoretical: UiewedParticipation in the using a data device112Increase knowledgeA comprehensive review of the subject's vocabularyTheoretical: Uising a data deviceDiscussion and questions132Increase knowledgeTheoretical: using a data subject'sDaily exam Viewed132Increase knowledgeTheoretical: deviceDaily exam Viewed142Increase knowledgeGisplayDaily exam Viewed	8	2	The student gains	Reverse migration	Theoretical:	Class
knowledge about the reverse migration methodusing a data display deviceLass assignments assignments92The student gains experience and how to prolong marriageHow to prolong marriageTheoretical: Uiewed displayClass assignments102The student gains experience and knowledge about bow to prolong marriageSprague ratesTheoretical: UiewedParticipation in the using a data device102The student gains experience and knowledge aboutSprague ratesTheoretical: UiewedParticipation in the using a data device112Second examClass using a dataInterestical: using a data deviceDiscussion and and and using a data112Increase knowledgeA comprehensive review of the subject's vocabularyTheoretical: Uising a data displayDiscussion and questions132Increase knowledgeTheoretical: using a data displayDaily exam Viewed132Increase knowledgeTheoretical: deviceDaily exam Viewed142Increase knowledgeIncrease knowledgeTheoretical: deviceDaily exam Viewed			experience and	method	Viewed	assignments
Image: second			knowledge about		using a data	
Image			the reverse		display	
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knowledge about how to prolong marriageusing a data display deviceusing a data display device102The student gains experience and knowledge aboutSprague ratesTheoretical: Viewed display deviceParticipation in the lecture112Second examUImage122Increase knowledgeA comprehensive review of the subject's vocabularyTheoretical: display deviceDiscussion132ImageA comprehensive review of the display deviceDaily exam vocabularyDaily exam display device132ImageImage reviewTheoretical: display deviceDaily exam display device142Image reviewImage reviewImage reviewImage reviewImage review142Image reviewImage reviewImage reviewImage reviewImage review142Image reviewImage reviewImage reviewImage reviewImage review142Image reviewImage reviewImage reviewImage reviewImage review142Image reviewImage reviewImage reviewImage reviewImage review142Image reviewImage reviewImage reviewImage reviewImage review142Image reviewImage reviewImage reviewImage review			experience and	marriage	Viewed	assignments
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122Increase knowledgeA comprehensive review of the subject'sTheoretical: using a data questions142Increase knowledgeA comprehensive review of the subject'sViewed display deviceIncrease and questions132Increase review of the vocabularyIncrease using a data deviceDiscussion puestions132Increase review of the review of the using a data displayDaily exam review of the using a data displayDaily exam142Increase review of the review of the review of the using a dataDiscussion review of the review of the using a data review of the review of the r	11	2		Second exam		
knowledgereview of the subject'sViewed using a data questions132Theoretical: using a dataDaily exam132Viewed using a data using a dataDaily exam142Intervention using a data using a dataDiscussion using a data	12	2	Increase	A comprehensive	Theoretical:	Discussion
using a dataquestionsusing a dataquestionsvocabularydisplaydevicedevice132Theoretical:ViewedViewedusing a datadisplayusing a datadisplayusing a datadisplay142Theoretical:Using a dataDiscussionViewedNeoretical:using a datadeviceusing a datadisplayusing a datadisplayusing a datadeviceusing a datadevice			knowledge	review of the	Viewed	and
vocabularydisplay device132Theoretical:Daily exam132Viewed using a data displayViewed using a data displayDaily exam142Theoretical:Discussion and				subject's	using a data	questions
Image: definition of the state of the sta				vocabulary	display	
13       2       Theoretical:       Daily exam         Viewed       Viewed       using a data       display         14       2       Theoretical:       Discussion         14       2       Viewed       and					device	
14     2       Viewed       Viewed       Viewed       using a data       display       device       Viewed       And	13	2			Theoretical:	Daily exam
14     2     using a data display device     Jiscussion Viewed					Viewed	
Image: Market M Market Market Mark					using a data	
Image: Markow in the system     Image: Constraint of the system       14     2     Theoretical:     Discussion       Viewed     and					display	
14     2     Theoretical:     Discussion       Viewed     and					device	
Viewed and	14	2			Theoretical:	Discussion
					Viewed	and

					using a data	questions
					display	
					device	
15	2		Fire	st semester		
	_			evam		
				exam		
	<u> </u>	23.	Cours	e Evaluation		
Distri	ibuting th	ne score out of 100 acc	ording	to the tasks ass	igned to the stu	dent such as
	daily	preparation, daily oral,	, montł	nly, or written e	xams, reports	. etc
Ту	pe of ass	ignment for the studer	nt	The degree granted to him		
Practic	cal and th	eoretical assignments,	, daily		10	
exa	ams, and	student participation i	in			
	+	the first exam			15	
		Second exam			15	
		final exam			60	
		Total score			100	
		24. Learning	g and	Teaching Reso	ources	
Requ	uired text	books (curricular books,	if any)	) 1. The methodological book prescribe		
			by the Minis	stry of Higher	· Education ar	
			S	cientific Rese	arch	
Main references (sources)				The book (Demography Analysis and		v Analysis and
			Models) by	Louis Henry	, translated b	
			, , , , , , , , , , , , , , , , , , ,	Mada Shari	fi	
Red	commend	ed books and reference	es		/	
	(scientifie	c journals, reports)				
	Electron	ic References, Website	s		/	

Course Name:
Numerical analysis1
Course Code:
Semester / Year:
First semester 2023-2024
Description Preparation Date:

32-3-2024								
Available Attendance Forms:								
				Ind	class			
	•	Number	of Cre	edit Hours (T	'otal) / Number of	Units (Total)		
				3 hours	, 1.5 units			
	· Co	ourse ad	Iminist	rator's nam: n	e (mention all, if ame)	f more than one		
				Name: Z	ahraa.N.kazem			
			E	mail: <u>Zahraa</u>	a.N.kazem@qu.eo	<u>du.iq</u>		
				Course	Objectives			
	Cou	rse Objecti	ves	The primary of	bjective of the course	is to introduce the stud		
				to the importa	ince of resorting to the	e use of numerical metho		
				in solving m	any problems in scien	tific life that are difficult of		
				cannot be solv	ved using mathematica	al analytical methods and		
				train him in	applying these numer	ical methods to calculate		
				approxin	nate numerical solutio	ns to these problems.		
			• Te	aching and I	_earning Strategie	es		
Str	ateg			1- Brain	storming strateg	SY		
				2-Dise	cussion strategy			
				3- E-le	earning strategy	1		
			4	- Teaching s	strategy with exa	mples		
		T		Course	Structure			
We	Hou	Requir	Unit	or subject	Learning	Evaluation method		
ek	rs	ed		name	method			
		Learni						
		ng						
		Outco						
		mes						
1	3	Introduc	A	bsolute Error	Lectures	discussion		
1	5	the stude			Example solution	Daily exams		
		to Abcolu				Homework		
		Adsolu Error						
2	3	Introduc	F	Relative Error	Lectures	discussion		
_	5	the stude			Example solution	Daily exams		
		to Relativ				Homework		
		e Error						
3	3	Introduc	R	ounded Error	Lectures	discussion		
		the stude Example solution Daily exams						

r					
		to			Homework
		Roun			
		ded			
		Error			
1	2	Introduc	Crusader Error	Lectures	discussion
4	5	the stude		Example solution	Daily exams
		to Crusa		I I I I I I I I I I I I I I I I I I I	Homework
		Error			
5	3	Using T	The truncated Error	Lectures	discussion
	-	truncate		Example solution	Daily exams
		Error			Homework
6	3	Introduc	Significant figures	Lectures	discussion
		the stude		Example solution	Daily exams
		to			Homework
		Significa			
7	2	Introduct	Methods for finding ro	Lectures	discussion
/	3	the stude	Methods for finding fo	Example solution	Daily exams
		to Metho		Example solution	Homework
		for findi			
		roots			
8	3	Introduc	Drawing method	Lectures	discussion
		the stude		Example solution	Daily exams
		to			Homework
		Draw			
		ing			
		meth			
		od			
0	2	Introduct	Analysis method (deleti	Lectures	discussion
9	5	the stude	Anarysis method (deleti	Example solution	Daily exams
		to Analy		2	Homework
		metho			
		(deletio			
10	3	Using T	The two-error metho	Lectures	discussion
		two-err		Example solution	Daily exams
		metho			Homework
11	3	Introduce	Newton Raphsons meth	Lectures	discussion
		the stude	for finding roots	Example solution	Daily exams
					HOILEWOIK
		newto			
		Raphs			
		S			
		metho			
		for			
		findir			
		roots			
12	3	Introduc	Definition of different	Lectures	discussion
		the stude	equation	Example solution	Daily exams
		to Definit			Homework

r								
		of differe						
		equatio						
13	3	Introduc	Front differences, bac	Lectures	discussion			
		the stude	differences,center	Example solution	Daily exams			
		to Fron	differences, and the		Homework			
		differenc	relationship between th					
		Dack						
		ontor						
		difference						
		nd the						
		relations						
		betwee						
		them						
14	3	Using Fr	Front and rear disassem	Lectures	discussion			
_	Ū	and rea	foundations	Example solution	Daily exams			
		disassem			Homework			
		foundatio						
15	3	Studen	Final exam		Score of 40			
		evaluati						
			Course I	Evaluation				
An	nual en	deavor =	daily preparation and	absences 10 mark	s + monthly exams			
			30 = 4	10	-			
			Final exar	n = 60				
			Learning and Te	aching Resource	S			
	Require	ed textboo	ks					
(0)	urrioulou	hooko if	001					
	Incular	DOOKS, II	any					
Mai	n refere	ences (sou	Irce 1- C. F. Gerald, P.	O. Wheatley, 1989, A	pplied Numerical Analys			
		,	Fourth Edition, A	Fourth Edition, Addison Wesley Longman Publishing Co, USA				
			2- C. E. Froberg, I	969, Introduction to N	Numerical Analysis, seco			
			Edition, Add	ison wesley Longman	i Publishing Co, USA			
Red	Recommended books		S					
	and references							
(s	(scientific journals,							
	reports)							
E	lectroni	c Reference	ces, <u>https://en.wi</u>	ikipedia.org/wiki/Nun	nerical_analysis_ JK			
	W	ebsites	"https://en.wikibool	- <u>nups III FERLIN</u> ss org/wiki/Numerical	Methods"·//en wikibo			
			oks	org/wiki/Numerical	Aethods			
			<u>010.</u>	<ul> <li>https HYP</li> </ul>	ERLINK			
			"https://en.v	wikipedia.org/wiki/M	ATLAB"://en.wikipedia.			
				/wiki/MAT	TLAB			

		Course Name:	
	Numerical analysis2		
	Course Code:		
	•	Semester / Year:	
	First s	emester 2023-2024	
	• Desci	ription Preparation Date:	
		32-3-2024	
	• Availa	ble Attendance Forms:	
		In class	
	• Number of Credit Ho	ours (Total) / Number of Units (Total)	
	3 h	ours , 1.5 units	
•	Course administrator's	s name (mention all, if more than one	
	name)		
	N	ame: Zahraa.N.kazem	
	Email:	Zahraa.N.kazem@qu.edu.iq	
	. (	Course Objectives	
	Course Objectives	The primary objective of the course is to introduce t	
		student to the importance of resorting to the use of	
		numerical methods in solving many problems in	
		scientific life that are difficult or cannot be solved us	
		mathematical analytical methods and to train him i	
		applying these numerical methods to calculate	
	approximate numerical solutions to these problem		
	Teaching	g and Learning Strategies	
Strateg	1-	Brainstorming strategy	
		2- Discussion strategy	
		3- E-learning strategy	
	4- Teac	hing strategy with examples	

	Course Structure						
W	Hou	Required	Unit or subject	Learning	Evaluation		
ee	rs	Learning	name	method	method		
k		Outcomes					
12		Introducing the student to Interpolation usin forward difference	Interpolation using forw differences	Lectures Example solutio	discussion Daily exams Homework		
3		Introducing the student to Interpolation using posterior differences	Interpolation using posterior differences	Lectures Example solutio	discussion Daily exams Homework		
5-	3	Introducing the student to Interpolatio n using center differences	Interpolation using cen differences	Lectures Example solutio	discussion Daily exams Homework		
7-	3	<ul> <li>Introducing the student to</li> <li>Numerical</li> <li>differentiati</li> <li>on using</li> <li>interpolatio</li> <li>n formulas</li> </ul>	Numerical differentiati using interpolation formulas	Lectures Example solutio	discussion Daily exams Homework		
9-		Using The Numerical integration	Numerical integration	Lectures Example solutio	discussion Daily exams Homework		
11-	3	Introducing the student to Some numerical methods of integration( Trapezium, Simpson)	Some numerical metho of integration(Trapeziu Simpson)	Lectures Example solutio	discussion Daily exams Homework		
14-		Introducing the student to Findi the numeric solution to	Finding the numerica solution to linear equati according to the follow methods: kaus,kaus Gordon, Jacobi	Lectures Example solutio	discussion Daily exams Homework		

r	1 1	1				· · · · · · · · · · · · · · · · · · ·		
		linear						
		equations						
		according t						
	t	he followin						
		methods:						
		kaus,kaus						
		Gordon,						
		Jacobi						
1		Student evaluation		Final exam		Score of 40		
	I I		•	Course Evalua	ition			
An	inual end	eavor = daily pr	epa	aration and absen	ces 10 marks + r	nonthly exams		
		curver during pr	•p:	30 = 40				
				Final exam = 60				
			rnir	a and Toaching	Pasourcos			
		• Lea			g and Teaching Resources			
F	Required to	extbooks (currici	Jlar	Principles of numerical analysis				
	books, if any)		•Applied engineering and numerical analysis					
				•Introduc	tion to numerical	analysis		
				•Appl	ied numerical and	alysis		
	Main references (sources)		1- C. F. Gerald, P. O. Wheatley, 1989, Applied Numeric Analysis, Fourth Edition, Addison Wesley Longman Publishing Co, USA.					
				2- C. E. Fröberg, 1	969, Introduction	to Numerical Analys		
				second Edition, A	ddison Wesley Lo: USA	ngman Publishing C		
R	Recommended books and							
refe	references (scientific journals,							
	rep	orts)						
El	ectronic R	, eferences. Web	site	https://en.wikip	edia.org/wiki/Num	erical_analysis		
				• 11.11	https HYPERLIN	<u>K</u>		
				<u>nttps://en.wikibooks</u>	org/wiki/Numeric	ncal_Methods"://e		
				<u></u>	<ul> <li><u>https HYP</u></li> </ul>	ERLINK		
				<u>"https://en.</u>	wikipedia.org/wiki	i/MATLAB"://en.wi		
					edia.org/wiki/N	IATLAB		

		Fourth stores
		Course Description Form
		81 Course Name:
		Statistical inference 1
		82. Course Code:
		83. Semester / Year:
		2024-2023
	84.	Description Preparation Date:2024/3/20
		20/3/2024
		85.Available Attendance Forms:
		Official attendance
	86.Number of	Credit Hours (Total) / Number of Units (Total)
		45 hours and 2 units
97		45 nours and 3 units
07.	Course at	name)
	Name	Professor Dr. Mohammed Habib Al-sharout
		Email:
		88. Course Objectives
Course	e Objectives	1-providing students with knowledge of the nature of
		statistical inference
		2teaching students the characteristics of abilities and methods of assessment
		<b>3teaching students to test statistical hypotheses</b>
		4-roviding them with information about the rules and basics
		statistical inference
	89.	Teaching and Learning Strategies
Strategy		
	1-knov	v how to achieve the characteristics of statistical estimates
	2-tind out h	now to get the lowest variance for a G-biased umvue estimator to determine the limits of confidence and the most powerful MPT to
		to determine the mints of confidence and the most powerful wit i t
	•	

	90. Course Structure					
Week	Hou	Required	Unit or subject name	Learning	Evaluation	
	rs	Learning		method	method	
		Outcomes				
1	3	Introducing the stude to Definition of estimation	Definition of estimation	Theory	General questio and discussion	
2	3	Introducing the stude to Graphical estimati	Graphical estimation	Theory	General questio 3discussion or i exam	
3	3	Introducing the stude to Method of poin estimation	Method of point estimation	Theory	General questio and discussion	
4	3	Introducing the stude to Unbiasedness	Unbiasedness	Theory	General questio discussion or da exam	
5	3	Introducing the stude to Mean squared err	Mean squared error	Theory	General questio and discussion	
6	3	Introducing the stude to consistency	consistency	Theory	General questio discussion or da exam	
7	3	Introducing the stude to	Sufficient statistics	Theory	General questio and discussion	
8	3	Introducing the stud to Sufficient statisti	Rao-black well theorem	Theory	General questio discussion or da exam	
9	3	Introducing the stud to Crammer Rao inequality	Crammer Rao inequality	Theory	General questio and discussion	
10	3	Introducing the stude to Introduction and definition	Introduction and definition	Theory	General questio discussion or da exam	
11	3	Introducing the stud to Confidence interv for mean	Confidence interval for mean	Theory	General questio and discussion	
12	3	Introducing the stud to Confidence interv for differ.	Confidence interval for differ.	Theory	General questio discussion or da exam	
13	3	Introducing the stud to Confidence interv for variance	Confidence interval for variance	Theory	General questio and discussion	
14	3	Introducing the stude to Confidence interv for ratio	Confidence interval for ratio	Theory	General questio discussion or da exam	
15	3		applications	Theory		
16	3	Final exam	Final exam	Editorial	Editorial	

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

The distribution of the grade out of 100 according to the tasks assigned by the student, and the course grade is divided as follows:

1-ten grades on a number of activities: commitment to daily preparation, participation and activity inside the Hall, preparation of reports, Daily exams.

2-15th grade exam of the first month.				
3-15th grade exam o	f the second month.			
4-60th grade	e final exam.			
92. Learning and	Teaching Resources			
Required textbooks (curricular books, if any)	Foreign books about statistical inference			
Main references (sources)	Introduction to statistical inference.Dr. Abd			
	Majid Hamza Al-Nasser			
Recommended books and references	All scientific journals, periodicals that conta			
(colontific journals, reports, )	information about statistical inference			
(scientino journais, reports)				
Electronic References, Websites	All websites specialized in statistical inferen			

	93. Course Name:		
	Statistical inference 2		
	94. Course Code:		
	95. Semester / Year:		
	2024-2023		
	96. Description Preparation Date:2024/3/20		
	20/3/2024		
	97. Available Attendance Forms:		
	Official attendance		
	98.Number of Credit Hours (Total) / Number of Units (Total)		
	45 hours and 3 units		
99.	Course administrator's name (mention all, if more than one		
	name)		
	Name: Professor Dr. Mohammed Habib Al-sharout		

				Email:		
			100.	Course Objective	S	
	Course	e Objectives	1-providi 2teachi 3- 4-rovid	ing students with knowl infere ng students the characte of asses teaching students to te ding them with informat statistica	edge of the natu ence ristics of abilities sment st statistical hyp tion about the ru il inference	are of statistical es and methods potheses ales and basics o
		101.	Teac	hing and Learning S	strategies	
Strategy       1-know how to achieve the characteristics of statistical estimates         2-find out how to get the lowest variance for a G-biased estimator         3- know how to determine the limits of confidence and the most powerful N						stimates estimator powerful MPT
Neek	Hou	Required Le	arning	Unit or subject	Learning	Evaluation
	rs	Outcom		<b>,</b>		
		Outcom	es	name	method	method
1	3	Introducing the s	tudent to Bay	name Bayes estimation	method Theory	<b>method</b> General questi
1	3	Introducing the s estima Introducing the s distrib	tudent to Bay ation student to Pri ution	name         Bayes estimation         Prior distribution	method Theory Theory	methodGeneral questiand discussionGeneral questi3discussion orexample
1 2 3	3 3 3	Introducing the s estima Introducing the s distrib Introducing th Posterior di	tudent to Bay ation student to Pri ution ne student to istribution	name         Bayes estimation         Prior distribution         Posterior distribution	methodTheoryTheoryTheory	methodGeneral questiand discussionGeneral questi3discussion orexamGeneral questiand discussion
1 2 3 4	3 3 3 3	Introducing the s estima Introducing the s distrib Introducing th Posterior di Introducing the st funct	tudent to Bay ation student to Pri ution ne student to istribution tudent to Uti tion	name         Bayes estimation         Prior distribution         Posterior distribution         Utility function	methodTheoryTheoryTheoryTheory	methodGeneral questiand discussionGeneral questi3discussion orexamGeneral questiand discussionGeneral questidiscussion or dgeneral questidiscussion or dexam
1 2 3 4 5	3 3 3 3 3 3	Introducing the s estimation Introducing the s distrib Introducing the function Introducing the st function Introducing the st function Introducing the st	tudent to Bay ation student to Pri ution ne student to istribution tudent to Uti tion student to Lo tion	name         Bayes estimation         Prior distribution         Posterior distribution         Utility function         Loss function	method Theory Theory Theory Theory Theory	methodGeneral questiand discussionGeneral questi3discussion orexamGeneral questiand discussionGeneral questidiscussion or dexamGeneral questidiscussion or dexamGeneral questiand discussionand discussionGeneral questidiscussion or dexamGeneral questiand discussion
1 2 3 4 5 6	3 3 3 3 3 3	Introducing the s estima Introducing the s distrib Introducing the funct Introducing the s funct Introducing the s funct	tudent to Bay ation student to Pri- ution ne student to istribution tudent to Uti- tion student to Lo- tion tudent to Bay	name         Bayes estimation         Prior distribution         Posterior distribution         Utility function         Loss function         Bayes estimation	methodTheoryTheoryTheoryTheoryTheoryTheoryTheory	methodGeneral questiand discussionGeneral questi3discussion onexamGeneral questiand discussionGeneral questidiscussion or dexamGeneral questidiscussion or dexamGeneral questiand discussionGeneral questiand discussionGeneral questiand discussionGeneral questidiscussion or dexam
1 2 3 4 5 6 7	3 3 3 3 3 3 3 3	Introducing the s estimation Introducing the s distrib Introducing the Sterior di Introducing the st funct Introducing the s estimation Introducing the st estimation Introducing the st hypoth	tudent to Bay ation student to Pri ution ne student to istribution tudent to Uti tion student to Lo tion tudent to Bay ation udent to Tess hesis	name         Bayes estimation         Prior distribution         Posterior distribution         Utility function         Loss function         Bayes estimation         Testing hypothesis	methodTheoryTheoryTheoryTheoryTheoryTheoryTheoryTheoryTheory	methodGeneral questiand discussionGeneral questi3discussion orexamGeneral questiand discussionGeneral questidiscussion or dexamGeneral questidiscussion or dexamGeneral questiand discussionGeneral questiand discussionGeneral questiand discussion or dexamGeneral questidiscussion or dexamGeneral questiand discussionand discussionand discussionand discussion
1 2 3 4 5 6 7 8	3 3 3 3 3 3 3 3	Introducing the s estima Introducing the s distrib Introducing th Posterior di Introducing the s funct Introducing the s estima Introducing the st hypoth	tudent to Bay ation student to Pri ution he student to istribution tudent to Uti tion student to Lo tion tudent to Bay ation udent to Tes hesis sudent to Sim hesis	name         Bayes estimation         Prior distribution         Posterior distribution         Utility function         Loss function         Bayes estimation         Testing hypothesis         Simple hypothesis	method Theory Theory Theory Theory Theory Theory Theory Theory	methodGeneral questiand discussionGeneral questi3discussion onexamGeneral questiand discussionGeneral questidiscussion or dexamGeneral questidiscussion or dexamGeneral questiand discussionGeneral questidiscussion or dexamGeneral questidiscussion or dexamGeneral questidiscussion or dexamGeneral questiand discussioGeneral questidiscussion or dexam
1 2 3 4 5 6 7 8 9	3 3 3 3 3 3 3 3 3 3	Introducing the s estimated Introducing the set distribution Introducing the set function Introducing the set function Introducing the set estimated Introducing the set hypotheset Introducing the set hypotheset Introducing the set hypotheset Introducing the set hypotheset Introducing the set	tudent to Bar ation student to Pri ution ne student to istribution tudent to Uti tion student to Lo tion tudent to Bar ation udent to Tes hesis student to Sim hesis	name         Bayes estimation         Prior distribution         Posterior distribution         Utility function         Loss function         Bayes estimation         Testing hypothesis         Simple hypothesis         Composite hypothesis	methodTheoryTheoryTheoryTheoryTheoryTheoryTheoryTheoryTheoryTheoryTheoryTheory	methodGeneral questiand discussionGeneral questi3discussion orexamGeneral questiand discussionGeneral questidiscussion or dexamGeneral questiand discussionGeneral questiand discussionGeneral questiand discussion or dexamGeneral questiand discussionGeneral questiand discussionGeneral questiand discussionGeneral questiand discussion or dexamGeneral questiand discussion or dexamGeneral questiand discussionand discussionGeneral questiand discussionand discussion
1 2 3 4 5 6 7 8 9 10	3 3 3 3 3 3 3 3 3 3 3	Introducing the s estima Introducing the s distrib Introducing th Posterior di Introducing the st funct Introducing the s estima Introducing the st hypotl Introducing the st hypotl Introducing the st hypotl Introducing the st error , powe	tudent to Bay ation student to Pri- ution ne student to Pri- ution tudent to Uti- tion student to Uti- tion tudent to Bay ation udent to Tess hesis cudent to Sim- hesis ne student to Typer function	name         Bayes estimation         Prior distribution         Posterior distribution         Utility function         Loss function         Bayes estimation         Testing hypothesis         Simple hypothesis         Composite hypothesis         Type of error , power function	methodTheoryTheoryTheoryTheoryTheoryTheoryTheoryTheoryTheoryTheoryTheoryTheoryTheoryTheory	methodGeneral questiand discussionGeneral questi3discussion orexamGeneral questiand discussionGeneral questidiscussion or dexamGeneral questiand discussionGeneral questiand discussionGeneral questiand discussion or dexamGeneral questiand discussionGeneral questiand discussiondiscussion or dexam

					<u> </u>				
12	3	Introducing the student to Generalized likelihood ratio t	Generalized likelihood ra	Theory	General question				
					exam				
13	3	Introducing the student to	Uniformly most powerful	Theory	General questio				
	0	Uniformly most powerful		-	and discussion				
14	3	Introducing the student to	Sequential test of hypothe	Theory	General question				
		Sequential test of hypothesi			discussion or da				
				m	exam				
15	3		applications	Theory					
16	3	Final exam	Final exam	Editorial	Editorial				
		103.	Course Evaluation						
The dis	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 The distribution of the grade out of 100 according to the tasks assigned by the student, and the course grade is divided as follows: 1-ten grades on a number of activities: commitment to daily preparation, participation and activity inside the Hall, preparation of reports, Daily exams. 2-15th grade exam of the first month. 3-15th grade exam of the second month. 4-60th grade final exam.								
		104. Learning	and Teaching Reso	ources					
Rec	uired te	extbooks (curricular books,	if any) Foreign bo	oks about stati	stical inference				
	Μ	ain references (sources)	Introduction	to statistical inf	ference.Dr. Abd				
			Ma	ajid Hamza Al-	Nasser				
Re	comme	ended books and reference	s All scientific j	ournals, period	licals that conta				
	(scien	tific journals, reports)	informatio	on about statis	tical inference				
	Elect	Electronic References, Websites All websites specialized in statistical inferen							

		10	5 Course Name				
		10	Time series 1	5.			
		10	6. Course Code	:			
				•			
107. Semester / Year:							
		First	semester 2023-2024	4			
		108. D	escription Preparat	ion Date:			
			22-3-2024				
		109. Av	vailable Attendance	Forms:			
			In class				
	110.	Number of Credi	t Hours (Total) / Nu	mber of Units	(Total)		
		3 h	ours , 1.5 units				
1	11.	Course administra	tor's name (mentic	on all, it more	than one		
		¥.7	name)				
		Name	e: prof. Dr. Tahir R.I	Dikheel			
		Emai	l: tahir.dikheel@qu	.edu.iq			
		112.	Course Objective	s			
		Course Objectives		the student to the c	concept of time seri		
		oburse objectives	and its compo	and its components and the most important forecasti			
				methods using time series.			
			2-Teaching th	2-Teaching the student the skills of dealing with data			
				the form of time s	eries.		
			3-Teaching	3-Teaching students the skills of constructing and			
3-Teaching students the skills of constructing and							
	112 Teaching and Learning Strategies						
		113. Teac	hing and Learning S	strategies	s models		
Stra	ategy	113. Teac	hing and Learning S 1- Brainstorming s	Strategies trategy	s models		
Stra	ategy	113. Teac	hing and Learning S 1- Brainstorming s 2- Discussion str	Strategies trategy ategy	s models		
Stra	ategy	113. Teac	thing and Learning S 1- Brainstorming s 2- Discussion str 3- E-learning str	Strategies trategy ategy ategy	s models		
Stra	ategy	113. Teac 4- Te	thing and Learning S 1- Brainstorming s 2- Discussion str 3- E-learning strategy wi	Strategies trategy ategy ategy th examples	s models		
Stra	ategy	113. Teac 4- Teac 114.	ching and Learning S 1- Brainstorming s 2- Discussion str 3- E-learning strategy wi course Structure	Strategies trategy ategy ategy th examples	s models		
Stra	ategy Hours	113. Teac 4- To 114. Required Learning	ching and Learning S 1- Brainstorming s 2- Discussion str 3- E-learning strategy wi Course Structure Unit or subject	Strategies trategy ategy ategy th examples Learning	s models		
Stra	Hours	113. Teac 4- To 114. Required Learning Outcomes	ching and Learning S 1- Brainstorming s 2- Discussion str 3- E-learning strategy wi course Structure Unit or subject name	Strategies trategy ategy ategy th examples Learning method	s models Evaluation method		
Stra Week	ategy Hours	113.       Teac         4- To       114.         Required Learning         Outcomes       Introducing the student to	ching and Learning S 1- Brainstorming s 2- Discussion str 3- E-learning strategy wi course Structure Unit or subject name The concept of time serie	Strategies trategy ategy ategy th examples Learning method Lectures	s models Evaluation method discussion		
Stra Week	Hours 3	113.Teac4- To114.Required Learning OutcomesOutcomesIntroducing the student to concept of time series	ching and Learning S 1- Brainstorming s 2- Discussion str 3- E-learning strategy wi Course Structure Unit or subject name The concept of time serie kinds of forecasting	Strategies trategy ategy ategy th examples Learning method Lectures Example solutio	s models Evaluation method discussion Daily exams Homework		
Stra Week	Hours 3	113.       Teac         4- To       114.         Required Learning         Outcomes         Introducing the student to concept of time series         Introducing the student to concept of time series	ching and Learning S 1- Brainstorming s 2- Discussion str 3- E-learning strategy wi course Structure Unit or subject name The concept of time serie kinds of forecasting Data patterns	Strategies trategy ategy ategy th examples Learning method Lectures Example solution Lectures	s models Evaluation method discussion Daily exams Homework discussion		

3	3	Introducing the student to	Mea	sures of quantitative	Lectures	discussion
U	0	metrics used in forecastii		forecasting	Example solution	Daily exams
						Homework
4	3	Introducing the student t	Diag	nostic of forecasting	Lectures	discussion
	-	accurate forecasting methe		methods	Example solution	Daily exams
						Homework
5	3	Using statistical programs	App	lications by SPSS O	Lectures	discussion
		time series		Statistica	Example solution	Daily exams
			¥7' 1	6 11 1	<b>T</b>	Homework
6	3	Introducing the student to	Kinds	of models in analys	Lectures	discussion
		types of models		methods	Example solution	Daily exams
7	2	Introducing the student to	-	Frend component	Lectures	discussion
/	3	general direction vehicle		riena component	Example solution	Daily exams
		general uncetion venier			Example solution	Homework
0	2	Introducing the student to	Se	easonal component	Lectures	discussion
0	3	seasonal vehicle		usonul component	Example solution	Daily exams
					1	Homework
9	3	Introducing the student to	Су	clical and irregular	Lectures	discussion
,	5	periodic and random vehi	-	components	Example solution	Daily exams
						Homework
10	3	Using statistical programs	App	lications by SPSS O	Lectures	discussion
	C	time series		Statistica	Example solution	Daily exams
						Homework
11	3	Introducing the student t	Intro	luction of exponenti	Lectures	discussion
		introductory methods		methods	Example solution	Daily exams
10		International the standard t	Matha	le ef erre eine(eine	T a strong s	Homework
12	3	introducing the student t	Metho	d duple everaging(sing	Example solution	Deily exemp
		introductory methods	al	in unple average),	Example solution	Homework
			UNL	methods		Homework
12	2	Introducing the student t	Single	exponential smooth	Lectures	discussion
15	3	introductory methods	Single	method	Example solution	Daily exams
						Homework
14	3	Using statistical software	App	lications by SPSS O	Lectures	discussion
TT	5	estimation		Statistica	Example solution	Daily exams
						Homework
15	3	Student evaluation		Final exam		Score of 40
		115	Course	а. Evaluation		
		115.	Cours	e Evaluation		
Annu	al endeav	vor = daily preparatior	n and al	bsences 10 mark	s + monthly exa	ms 30 = 40
		F	'inal ex	am = 60	2	
		116 Learning	hae r	Teaching Reso		
		110. Leannin	y anu	reaching Resu		
Requ	ired text	books (curricular books,	if any)			
	Main	references (sources)		Time Series An	alysis Forecasting ar	nd Control,( 2008
	man	(000,000)		GEORGE E. P. B	OX GWILYM M. JH	ENKINS GREGO
				C. REINSEL, FO	OURTH EDITION,	A JOHN WILEY &
ļ				SO	NS, INC., PUBLICA	TION
Rec	commend	ed books and reference	es	Recursive E	stimation and Time	Series Analysis
	(	- !		An Introduction	tor the Student and I	ractitioner, (2011
	(scientific	c journals, reports)		Peter C. Young	, second edition, Sp	oringer Heidelberg
	Electron	in Deferences Mehaita	<u> </u>	Doi	London New	I UIK.
	Election	ic References, website	5			

		A			
	117. (	Course Name:			
	Time s	eries 2			
	118.	Course Code:			
	119. Semester / Year:				
	Second semes	ter 2023-2024			
	120. Descript	ion Preparation Date:			
	22-3-	-2024			
	121. Available	Attendance Forms:			
	In c	lass			
122.	Number of Credit Hours	(Total) / Number of Units (Total)			
	3 hours	, 1.5 units			
123.	Course administrator's na	ame (mention all, if more than one			
	Name: prof.	Dr. Tahir B.Dikheel			
	Email: tahir.	dikheel@qu.edu.iq			
	124. Cour	rse Objectives			
	Course Objectives	1-Introducing the student to the concept of time seri			
		and its components and the most important forecasti			
		methods using time series.			
		2-Teaching the student the skills of dealing with data			
		the form of time series.			
		3-Teaching students the skills of constructing and			
		estimating time series models			
	125. Teaching an	d Learning Strategies			
Strategy	1- Brai	nstorming strategy			
	2- Di	scussion strategy			
	3- E-	learning strategy			
1	4- Teaching	strategy with examples			

126. Course Structure						
Week	Hours	Required Learning	Unit or subject	Learning	Evaluation	
		Outcomes	name	method	method	
1	3	Introducing the student t	Double exponential metho	Lectures	discussion	
1	5	introductory methods	(Brown method, Holt meth	Example solution	Daily exams	
					Homework	
2	3	Introducing the student t	Triple exponential metho	Lectures	discussion	
		introductory methods	seasonal Winter method	Example solution	Daily exams	
-	-			T (	Homework	
3	3	Use statistical software t	Applications by SPSS O	Lectures Example solution	discussion	
		bootstrap	Statistica	Example solution	Homework	
1	2	Introducing the student to	Stationarity in mean and	Lectures	discussion	
4	3	types of stability	variance	Example solution	Daily exams	
				Linumpre solution	Homework	
5	3	Introducing the student t	Data transformation,	Lectures	discussion	
5	5	ways of self-relationshi	autocorrelation and partia	Example solution	Daily exams	
			autocorrelation function		Homework	
6	3	Introducing the student t	Box-Jenkins method in tir	Lectures	discussion	
Ū	Ũ	Box-Jenkins analysis meth	series	Example solution	Daily exams	
					Homework	
7	3	Introducing the student t	Model building stages,	Lectures	discussion	
		diagnostic methods	identification	Example solution	Daily exams	
2		Takan I 'an dia ay dia ay		T t	Homework	
8	3	Introducing the student t	model Identification by A	Example solution	discussion Daily ayams	
		function	and FACE	Example solution	Homework	
0	2	Introducing the student t	Estimation stage	Lectures	discussion	
9	3	grading methods	Estimation stage	Example solution	Daily exams	
		88		F	Homework	
10	3	Introducing the student t	Moments and maximum	Lectures	discussion	
10	5	grading methods	likelihood methods	Example solution	Daily exams	
					Homework	
11	3	Introducing the student t	Diagnostic checking stag	Lectures	discussion	
		methods for checking mo		Example solution	Daily exams	
		suitability		<b>.</b>	Homework	
12	3	Introducing the student t	Box-Pierce, Box-Ljung a	Lectures	discussion	
		testing methods	Dickey–Fuller tests	Example solution	Daily exams	
10	0	Introducing the student t	Forecasting stages	Lectures	discussion	
13	3	forecasting methods	i orceasing stages	Example solution	Daily exame	
		Torecusting methods		Example solution	Homework	
11	3	Using statistical software	Applications by SPSS O	Lectures	discussion	
14	5	estimation	Statistica	Example solution	Daily exams	
				1	Homework	
15	3	Student evaluation	Final exam		Score of 40	
20	0	127.	Course Evaluation			
Annu	alandaa	vor – daily proparation	and abconcos 10 marts	c i monthly ave	mc 20 - 40	
Annua	arenuea	F F F F F	inal exam = 60	s + montiny exa	1115  50 = 40	
		128. Learning	g and Teaching Reso	ources		
Requ	ired text	books (curricular books,	if any)			
	Main	references (sources)	Time Series An GEORGE E. P. B C. REINSEL, F	alysis Forecasting a OX GWILYM M. J OURTH EDITION,.	nd Control,( 2008 ENKINS GREGO A JOHN WILEY &	

	SONS, INC., PUBLICATION
Recommended books and references (scientific journals, reports)	Recursive Estimation and Time Series Analysis An Introduction for the Student and Practitioner, (2011) Peter C. Young, Second edition, Springer Heidelberg Dordrecht London New York.
Electronic References, Websites	

	•
12	29. Course Name:
Design ar	nd Analysis of Experiment 1
1.	30. Course Code:
131	. Semester / Year:
First	semester 2023-2024
132. D	Description Preparation Date:
	22-3-2024
133. A	vailable Attendance Forms:
	In class
134. Number of Cred	it Hours (Total) / Number of Units (Total)
3	hours , 3 units
135. Course administra	ator's name (mention all, if more than one
	name)
Na	me: prof. Dr. Ali Al-knini
	Email:
136.	Course Objectives
Course Objectives	Enable students to identify mathematical models and the foundati
	of their development of various designs commonly used in scient
	experiments in all fields , in addition to providing him with
	mathematical formulas for calculating the compounds of variation
	each studied mathematical model and then writing a table of anal

				of variation (ANOVA) to test the hypotheses of the proposed mode				
				experiments based on	the nature of the ex	xperiment and the		
				mathematical	I model used in the	analysis		
	137. Teaching and Learning Strategies							
Stra	itegy			1- Brainstorming s	trategy			
				2- Discussion stra	ategy			
				3- E-learning stra	ategy			
			4- T	eaching strategy wi	th examples			
			138.	Course Structure				
Week	Hou	rs	Required Learning	Unit or subject	Learning	Evaluation		
			Outcomes	name	method	method		
1		3	Introducing the student t Concepts of design of experiments, the	Concepts of design of experiments, assumptions to provided for the table of analysis of variability, tests homogeneity of variabilit	Lectures Example solution	discussion Daily exams Homework		
2		3	Introducing the student to Linear models in the analy of variability for one criter and two criteria.	Linear models in the analy of variability for one criter and two criteria.	Lectures Example solutio	discussion Daily exams Homework		
3		3	Introducing the student to trial tests (orthogonal convergence tests) the	Pre-trial tests (orthogona convergence tests)	Lectures Example solution	discussion Daily exams Homework		
4		3	Introducing the student t Post-trial tests multiple comparison tests (, Scheff Duncan's Multiple Rang ,L.S.D Tukey,Dunnett)	Post-trial tests multiple comparison tests ( , Scheff Duncan's Multiple Rang ,L.S.D Tukey,Dunnett)	Lectures Example solution	discussion Daily exams Homework		
5		3	Introducing the student t Fully randomized design design requirements, mathematical model, effe estimation, estimation o contrast compounds wit practical examples)	Fully randomized design design requirements, mathematical model, effect estimation, estimation of contrast compounds with practical examples).	Lectures Example solutio	discussion Daily exams Homework		
6		3	Introducing the student to completely randomized de in the case of more than of view in one experimental u the	A completely randomize design in the case of more t one view in one experimer unit.	Lectures Example solutio	discussion Daily exams Homework		
7	7 3		Introducing the student t Design of complete rando sectors ( design requireme mathematical model, estimation of covariance compounds with applicati examples, the	Design of complete rando sectors ( design requiremen mathematical model, estimation of covariance compounds with applicati examples.	Lectures Example solution	discussion Daily exams Homework		
8		3	Introducing the student to relative efficiency of the design of random complet sectors, the design of random balanced incomplete sector the	The relative efficiency of t design of random comple sectors, the design of rando balanced incomplete secto	Lectures Example solution	discussion Daily exams Homework		
9		3	Introducing the student t	Latin square design ( desi	Lectures	discussion		

		Latin square design ( desi requirements, mathematic model, estimation of cont compounds with practic: examples). the	requir model comj	ements, mathematic , estimation of contr pounds with practica examples).	Example solution	Daily exams Homework
10	3	Introducing the student t Estimation of the missin values of the design, the relative efficiency of the L square design compared to design of random whole	Estir valu relative square desi	nation of the missin les of the design, the e efficiency of the La design compared to gn of random whole sectors	Lectures Example solution	discussion Daily exams Homework
11	3	Introducing the student t Transit design.		Transit design.	Lectures Example solution	discussion Daily exams Homework
12	3	Introducing the student to design of the Yuden box	The de	sign of the Yuden b	Lectures Example solution	discussion Daily exams Homework
13	3	Introducing the student t	The de	sign of the Latin-Gr square .	Lectures Example solution	discussion Daily exams Homework
14	3	Introducing the student t Covariance analysis (mathematical model an covariance analysis compounds for basic desig relative sufficiency.	Co (mat co compo re	ovariance analysis hematical model and ovariance analysis ounds for basic desig lative sufficiency.	Lectures Example solutio	discussion Daily exams Homework
15	3	Student evaluation		Final exam		Score of 40
		139.	Cours	e Evaluation		
Annu	al endea	vor = daily preparation F	n and al 'inal ex	osences 10 mark am = 60	s + monthly exa	ams 30 = 40
		140. Learning	g and	Teaching Reso	urces	
Requ	iired textl	oooks (curricular books,	if any)	Design an (cc Design and a	d analysis of mputer use) nalysis of exp	experiments 2010 periments 20
	Main	references (sources)		Design and analysi	s of experiments (co I	omputer use) 2018 l
Rec	commend	ed books and reference	es	Basic concepts in	the design of expe	riments authored by
	(scientifi	c journals, reports)		Experimer	tal Designs W.G.C	ochran G.M.C
	Electron	ic References, Website	s			

<b>Course Description Form</b>				
14	1. Course Name:			
Design an	nd Analysis of Experiment 2			
14	42. Course Code:			
143	Semester / Year:			
First	semester 2023–2024			
144 Γ	escription Preparation Date:			
	22-3-2024			
145 A	vailable Attendance Forms:			
1-13, 11	In class			
146. Number of Cred	it Hours (Total) / Number of Units (Total)			
3	hours , 3 units			
147. Course administra	ator's name (mention all, if more than one name)			
Na	me: prof. Dr. Ali Al-knini			
	Email:			
148.	Course Objectives			
Course Objectives	Enable students to identify mathematical models and the foundation			
	of their development of various designs commonly used in scient			
	experiments in all fields , in addition to providing him with			
	mathematical formulas for calculating the compounds of variation			
	each studied mathematical model and then writing a table of analy			
	of variation (ANOVA) to test the hypotheses of the proposed mode			
	experiments based on the nature of the experiment and the			
	mathematical model used in the analysis			

	149. Teaching and Learning Strategies								
Stra	tegy	1- Brainstorming strategy 2- Discussion strategy 3- E-learning strategy 4- Teaching strategy with examples							
	150. Course Structure								
Week	Hours	Required Learning	Unit or subject	Learning	Evaluation				
		Outcomes	name	method	method				
1	3	Introducing the student t Concepts of design of experiments, the	Concepts of design of experiments, assumptions to provided for the table of analysis of variability, tests homogeneity of variabilit	Lectures Example solutio	discussion Daily exams Homework				
2	3	Introducing the student to Linear models in the analy of variability for one criter and two criteria.	Linear models in the analy of variability for one criter and two criteria.	Lectures Example solution	discussion Daily exams Homework				
3	3	Introducing the student to 1 trial tests (orthogonal convergence tests) the	Pre-trial tests (orthogona convergence tests)	Lectures Example solution	discussion Daily exams Homework				
4	3	Introducing the student t Post-trial tests multiple comparison tests (, Scheff Duncan's Multiple Rang ,L.S.D Tukey,Dunnett)	Post-trial tests multiple comparison tests ( , Scheff Duncan's Multiple Rang ,L.S.D Tukey,Dunnett)	Lectures Example solutio	discussion Daily exams Homework				
5	3	Introducing the student t Fully randomized design design requirements, mathematical model, effe estimation, estimation o contrast compounds wit practical examples).	Fully randomized design design requirements, mathematical model, effec estimation, estimation o contrast compounds with practical examples).	Lectures Example solution	discussion Daily exams Homework				
6	3	Introducing the student to completely randomized de- in the case of more than o view in one experimental u the	A completely randomize design in the case of more t one view in one experimer unit.	Lectures Example solution	discussion Daily exams Homework				
7	3	Introducing the student t Design of complete rando sectors ( design requireme mathematical model, estimation of covariance compounds with applicati examples, the	Design of complete rando sectors ( design requiremen mathematical model, estimation of covariance compounds with applicati examples.	Lectures Example solution	discussion Daily exams Homework				
8	3	Introducing the student to relative efficiency of the design of random complet sectors, the design of rando balanced incomplete sector the	The relative efficiency of t design of random comple sectors, the design of rando balanced incomplete secto	Lectures Example solution	discussion Daily exams Homework				
9	3	Introducing the student t Latin square design ( desi requirements, mathematic model, estimation of contr compounds with practic	Latin square design ( desi requirements, mathematic model, estimation of contr compounds with practica examples).	Lectures Example solution	discussion Daily exams Homework				

10	3	examples). the Introducing the student t Estimation of the missin values of the design, the relative efficiency of the L square design compared to design of random whole sectors	Estir valu relative square desi	nation of the missin, les of the design, the e efficiency of the La design compared to gn of random whole sectors	Lectures Example solution	discussion Daily exams Homework	
11	3	Introducing the student t Transit design.		Transit design.	Lectures Example solution	discussion Daily exams Homework	
12	3	Introducing the student to design of the Yuden box	The de	sign of the Yuden b	Lectures Example solution	discussion Daily exams Homework	
13	3	Introducing the student t	The design of the Latin-Gr square .		Lectures Example solution	discussion Daily exams Homework	
14	3	Introducing the student t Covariance analysis (mathematical model an covariance analysis compounds for basic desig relative sufficiency.	Covariance analysis (mathematical model and covariance analysis compounds for basic desig relative sufficiency.		Lectures Example solution	discussion Daily exams Homework	
15	3	Student evaluation		Final exam		Score of 40	
	151. Course Evaluation						
Annu	al endea	vor = daily preparation F	bsences 10 mark am = 60	s + monthly ex	ams 30 = 40		
	152. Learning and Teaching Resources						
Required textbooks (curricular books, if any)				Design and analysis of experiments (computer use) 2010 Design and analysis of experiments 20			
Main references (sources)				Design and analysis of experiments (computer use) 2018 I I			
Recommended books and references				Basic concepts in the design of experiments authored by Charles Hicks localization measured seven fifths			
		c journais, reports)	Experimer	ital Designs W.G.C	ocnran G.M.C		
	Electron	ic References, Website					

			Course Descri	ption Form			
153. Course Name:							
Econometrics 1							
	154. Course Code:						
	155. Semester / Year:						
			First semes	ster 2023-2024			
			156. Descri	ption Preparation	n Date:		
			22-	-3-2024			
			157. Availab	le Attendance For	ms:		
			Ir	n class			
158.	•	Num	ber of Credit Hou	rs (Total) / Numb	er of Units (	Total)	
150	<u> </u>		3 hours	, 1.5 units	all if more t	han ana	
159.		uise	auministrators	name)			
S	Saif h	osam	Raheem	S	aif.hosam@	qu.edu.iq	
160. Course Objectives							
Course Objectives		The course focuses on studying the problems facing linear regression					
		models in the economic field. The course aims to provide students with the concepts and techniques					
		necessary to address these problems.					
		The course seeks to enable students to reach the best results in					
		16	161 Teaching and Learning Strategies				
Strategy		2- Discussion strategy					
			3- E-learning strategy				
			4- Teaching strategy with examples				
162. Course Structure							
Evaluation	Lear	ning	Unit or subject	Required	Hours	Week	
method	met	hod	name	Learning			
				Outcomes			
3		1	Definition of	The concept of	discussion Daily	Lectures Example	
			economic measurement	economic measurement	exams Homework	solutions	

	1		1	1	
3	2	Standard search features	Standard search	discussion Daily exams Homework	Lectures Example solutions
3	3	Ordinary least squares assumptions	Ordinary least squares	discussion Daily exams Homework	Lectures Example solutions
3	4	Ordinary least squares assumptions	Ordinary least squares	discussion Daily exams Homework	Lectures Example solutions
3	5	Ordinary least squares estimations	Ordinary least squares	discussion Daily exams Homework	Lectures Example solutions
3	6	Ordinary least squares estimationsOrdinary least squaresdiscussion Daily exams Homework		discussion Daily exams Homework	Lectures Example solutions
3	7	Inference in simple regression analysis	Simple regression analysis	discussion Daily exams Homework	Lectures Example solutions
3	8	Inference in simple regression analysis		discussion Daily exams Homework	Lectures Example solutions
3	9	Estimating model parameters using MLE method	MLE method	discussion Daily exams Homework	Lectures Example solutions
3	10	Estimating model parameters using MLE method	MLE method	discussion Daily exams Homework	Lectures Example solutions
3	11	Measure confidence intervals	Confidence intervals	discussion Daily exams Homework	Lectures Example solutions
3	12	Demand function analysis	Demand functions	discussion Daily exams Homework	Lectures Example solutions
3	13	Solve the end- of-chapter exercises	End-of-chapter exercises	discussion Daily exams Homework	Lectures Example solutions
3	14	Solve the end- of-chapter	End-of-chapter exercises	discussion Daily exams	Lectures Example solutions

3	15	exerc Stud evalu	rcises Homework Ident final exam			Score of 40
163. Course Evaluation						
Annual endeavor = daily preparation and absences 10 marks + monthly exams 30 = 40 Final exam = 60						
164. Learning and Teaching Resources						
Required textbooks (curricular						
books, if any)						
Main references (sources)						
Electronic References, Websites						

165. Course Name:					
Econometrics 2					
166. Course Code:					
167. Semester / Year:					
First semester 2023-2024					
168. Description Preparation Date:					
3-2-2024					
169. Available Attendance Forms:					
In class					
170. Number of Credit Hours (Total) / Number of Units (Total)					
3 hours , 1.5 units					
171. Course administrator's name (mention all, if more than one					
name)					
Saif hosam Raheem saif.hosam@qu.edu.iq					
172. Course Objectives					
<b>Course Objectives</b> The course focuses on studying the problems facing linear regression					
models in the economic field.         The course aims to provide students with the concepts and techniq         necessary to address these problems.         The course seeks to enable students to reach the best result         analyzing economic data using linear regression models.         173.         Teaching and Learning Strategies         Strategy         1- Brainstorming strategy         2- Discussion strategy         3- E-learning strategy         4- Teaching strategy with examples         174.					
--	---------	--	-----------------------------	---------------------------------------	----------------------------------
Evaluation	Learnin	g Unit or	Required	Hours	Week
method	method	d subject	Learning		
		name	Quitcomes		
3	1	Estimation about the origin	Point of origin	discussion Daily exams Homework	Lectures Example solutions
3	2	ols estimates in the case of GLM	General linear model	discussion Daily exams Homework	Lectures Example solutions
3	3	ols estimates in the case of GLM	General linear model	discussion Daily exams Homework	Lectures Example solutions
3	4	MLE estimators in GLM	General linear model	discussion Daily exams Homework	Lectures Example solutions
3	5	MLE estimators in GLM	General linear model	discussion Daily exams Homework	Lectures Example solutions
3	6	Analysis of deviations in GLM	General linear model	discussion Daily exams Homework	Lectures Example solutions
3	7	Analysis of deviations in GLM	General linear model	discussion Daily exams Homework	Lectures Example solutions
3	8	The problem of heterogeneity of variance	Contrast heterogeneity	discussion Daily exams Homework	Lectures Example solutions
3	9	The problem of heterogeneity of variance	Contrast heterogeneity	discussion Daily exams Homework	Lectures Example solutions
3	10	) Weighted least squares	Least squares	discussion Daily exams Homework	Lectures Example solutions
3	11	Weighted least squares	Least squares	discussion Daily exams Homework	Lectures Example solutions
3	12	Weighted least squares	Least squares	discussion Daily exams Homework	Lectures Example solutions
3	13	Solve the end-of- chapter exercises	End-of-chapter exercises	discussion Daily exams Homework	Lectures Example solutions

3	14	Solve the end- chapter exerci	of- ses	End-of-chapter exercises	discussion Daily exams Homework	Lectures Example solutions
3	15	Student evaluation		final exam		Score of 40
		175.0	Cour	se Evaluation		
Annual ende	Annual endeavor = daily preparation and absences 10 marks + monthly exams 30 = 40 Final exam = 60					xams 30 = 40
	17	6. Learning	and	I Teaching Reso	ources	
Required tex	xtbooks (curr	icular				
boo	ks, if any)					
Main references (sources)				Ecor	nometrics	
Electronic Re	ferences, We	bsites				

177. Course Name: Methods and ethics of scientific research						
178. Course Code:						
179. Semester / Year:2024-2023						
180. Description Preparation Date:2024/3/20						

181.         Available Attendance Forms: Official attendance								
	182. Number of Credit Hours (Total) / Number of Units (Total)							
			2011.0.000					
	183.	Course administra	tor's name (mention	on all, if more	than one			
		Namo: M	name)	lim Hachim				
		Ema	il: ali.alfahhm@qu	.edu.iq				
		184.	Course Objective	es				
	Course Objectives       1-definition of the curriculum, the origin of curric their classifications, development and relationsh with other sciences.         2 - How to collect preliminary information for research.         3-definition of the sample, its types, how to colle and select it through the approved methods.         4-definition of the questionnaire and how to build (design).         5-definition of variables and how to analyze ther through a number of descriptive computer applications and graphical forms such as: SPS3							
		185. Teac	hing and Learning	Strategies				
Str	Strategy This course deals with the methods and approaches used i scientific research, and reviews the importance of studying various research methods in statistical description that can used in statistical description.							
		186.	Course Structure					
Week	Hou	Required Learning	Unit or subject	Learning	Evaluation			
1	<b>rs</b>	Outcomes	name Flomonts of the	Theory	Conoral			
	Z	the classification of th research curriculum	research plan	Theory	questions an discussion			
2	2	Introducing students t the classification of th	Elements of the research plan	Theory	General questions,			

		naaaanah auni aulum			diaguagian a
		research curriculum			daily ovam
2	2	Introducing students t	Classification of the	Theory	Conoral
5	2	the classification of th	rosoarch mothod	Theory	questions an
		research curriculum	research methou		discussion
4	2	Introducing students t	Classification of the	Theory	Conoral
4	Z	the algorithms to a fith		Theory	General
			research method		questions,
		research curriculum			discussion o
	2			<b>T</b> ]	daily exam
5	Z	Introducing students t	Composition of	Ineory	General
		the structure of resear	research and		questions an
		and information collection	information collection		discussion
6	2	Introducing students t	Initial information a	Theory	General
		the initial information a	data encoding		questions,
		data coding			discussion o
					daily exam
7	2	Introducing students t	Data classification	Theory	General
		the classification of dat	sample size estimati		questions an
		estimating the sample s	and sample vocabula		discussion
		and selecting the samp	selection		
		vocabulary			
8	2	Definition of random	Random selection, no	Theory	General
		selection, non-randon	random selection ar		questions,
		selection and random	random samples		discussion o
		samples			daily exam
9	2	Introducing students t	Information collection	Theory	General
		how to collect informati			questions an
					discussion
10	2	Introducing students t	Correspondence	Theory	General
		correspondence	-	-	questions,
		-			discussion o
					daily exam
11	2	Teaching students how	Designing the	Theory	General
		design a questionnair	questionnaire form	J.	questions an
		form	1		discussion
12	2	Introducing students t	Computer applicatio	Theory	General
		computer application	of descriptive statist	- 5	questions.
		with descriptive statisti	and graphic forms Sp		discussion o
		and SPSS graphs			daily exam
13	2	Introducing students t	Computer applicatio	Theorv	General
		computer application	with correlation an		questions an
		with correlation and	regression SpSS		discussion
		regression relationship			
		SpSS			
14	2	Introducing students t	Computer applicatio	Theory	General
	-	computer applications	of variance analysis a	111001 y	questions
		analysis of variance an	hypothesis selectio		discussion o
		selection of hypothese	(design of experimen		daily exam
		(design of experiment	computer applicatio		carry chain
		computer annlications	of nonnarametric		
		compater applications	or nonparametric		

		non-pedagogical metho	me	thods				
15	2	Final exam	Fina	l exam	Editorial	Editorial		
	187. Course Evaluation							
Distr	ibuting	g the score out of 100 acco	ording to the	e tasks ass	igned to the stu	dent such as		
	dai	ly preparation, daily oral,	monthly, or	written e	xams, reports	. etc		
The dis	tributi	ion of the grade out of 100	according	to the task	s assigned by th	e student, and		
		the course gr	ade is divid	ed as follo	WS:			
1-ten g	rades	on a number of activities:	commitmen	t to daily	preparation, par	ticipation and		
		activity inside the Hall, J	preparation	of report	s, Daily exams.			
		2-15th grade	exam of th	e first moi	nth.			
		3-15th grade e	exam of the	second m	onth.			
		4-60th	n grade fina	exam.				
		188. Learnin	g and Teacl	ning Resou	urces			
Req	uired to	extbooks (curricular books,	if any)					
	Μ	lain references (sources)		Scient	tific research be	tween theory ar		
		, , , , , , , , , , , , , , , , , , ,		pr	actice, Dr. Moha	mmed Jalal al-		
				Gha	ndour, professo	r of Information		
				So	cience at Beni Sı	lef University		
Re	comme	ended books and references	S	All sc	cientific journals	, periodicals tha		
	(scier	ntific journals reports)		conta	in information a	about descriptiv		
	(00101			statisti	ical methods in o	data collection a		
					analys	is.		
	Elect	ronic References, Websites	6	All we	bsites are speci	alized in scienti		
				metho	dology and des	criptive statistic		
					analys	SIS.		

189. Course Name:					
Multivariate Statistical (1)					
190. Course Code:					
191. Semester / Year:					
2024-2023					
192. Description Preparation Date:2024/3/20					
20/3/2024					
193. Available Attendance Forms:					
Official attendance					
194. Number of Credit Hours (Total) / Number of Units (Total)					
45 hours and 3 units					
195. Course administrator's name (mention all, if more than one					
name)					

Name: Assit.Professor Dr. bahr kadhim mohammed Email: bahr.mahemmed@qu.edu.iq								
	196. Course Objectives							
Course Objectives1Application to actual data / Assigning students to r topic in advance from several scientific sources rele the course and lecture • After teaching the subject, the researcher can l 				tudents to read the cources relevant to archer can help ific applications nclusions that help ion topics and discuss s				
		197.	Teaching and Learning	g Strategies				
Str	Strategy         1 How to measure the levels of (the topic) according to the available data and how to interpret the results         2- How to use statistical programs such as SPSS, MINTAB,         3- Graduating the student with knowledge of this important applied subject in							
		198. Course Structure						
Week		Required Unit or subject name						
week	Hou	Required	Unit or subject name	Learning	Evaluation			
WEEK	Hou rs	Required Learning	Unit or subject name	Learning method	Evaluation method			
1	Hou rs	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method			
1	Hou rs 3	Required Learning Outcomes Introducing the stud to Matrix operation	Unit or subject name	Learning method Theory	Evaluation method General questions an discussion			
1 2 3	Hou rs 3 3 3	Required Learning Outcomes Introducing the stu- to Matrix operation Introducing the stude to Vector operation Introducing the stude	Unit or subject name	Learning method Theory Theory Theory	Evaluation method General questions an discussion General questions, 3discussion or ily exa General questions an			
1 2 3 4	Hou rs 3 3 3 3 3	Required Learning Outcomes Introducing the stude to Matrix operation Introducing the stude to Vector operation Introducing the stude to Rank of matrin Introducing the stude to Characteristic re- and vectors of a metric	Unit or subject name	Learning method Theory Theory Theory Theory	Evaluation method General questions an discussion General questions, 3discussion or ily exa General questions an discussion General questions, discussion or daily exa			
1 2 3 4 5	Hou rs 3 3 3 3 3 3	Required Learning Outcomes Introducing the stude to Matrix operation Introducing the stude to Vector operation Introducing the stude to Rank of matrin Introducing the stude to Characteristic rea and vectors of a material Introducing the stude to Multivariate Non Density	Unit or subject name	Learning method Theory Theory Theory Theory Theory	Evaluation method General questions an discussion General questions, 3discussion or ily exa General questions an discussion General questions, discussion or daily exa General questions an discussion			
1 2 3 4 5 6	Hou rs 3 3 3 3 3 3 3 3	Required Learning Outcomes Introducing the stude to Matrix operation Introducing the stude to Vector operation Introducing the stude to Rank of matrin Introducing the stude to Characteristic re- and vectors of a material Introducing the stude to Multivariate Non Density First Exam	Unit or subject name         de       Matrix operation         de       Vector operations         de       Rank of matrix         de       Rank of matrix         de       Characteristic roots and vectors and vectors         de       Multivariate Normal Density         First Exam       First Exam	Learning method Theory Theory Theory Theory Theory Theory	Evaluation method General questions an discussion General questions, 3discussion or ily exa General questions an discussion General questions, discussion or daily exa General questions an discussion			
1 2 3 4 5 6 7	Hou rs 3 3 3 3 3 3 3 3	Required Learning Outcomes Introducing the stude to Matrix operation Introducing the stude to Vector operation Introducing the stude to Rank of matri Introducing the stude to Characteristic rea and vectors of a made Introducing the stude to Multivariate Non Density First Exam	Unit or subject name         de       Matrix operation         de       Matrix operation         de       Vector operations         de       Rank of matrix         de       Characteristic roots and vectors matrix         de       Multivariate Normal Density         T       First Exam         de       Partial Correlation Coefficien	Learning method Theory Theory Theory Theory Theory Theory Theory	Evaluation method General questions an discussion General questions, 3discussion or ily exa General questions an discussion General questions, discussion or daily exa General questions an discussion General questions an discussion or daily exa General questions, discussion or daily exa General questions an discussion			
1 2 3 4 5 6 7 8	Hou rs 3 3 3 3 3 3 3 3 3 3 3	Required Learning Outcomes Introducing the stud to Matrix operation Introducing the stud to Vector operation Introducing the stud to Rank of matri Introducing the stud to Characteristic re- and vectors of a matri Introducing the stud to Multivariate Non Density First Exam Introducing the stud to Partial Correlat Coefficient Introducing the stud to Coefficient on Determination	Unit or subject name         d       Matrix operation         d       Matrix operations         d       Vector operations         d       Rank of matrix         x       Characteristic roots and vectors matrix         d       Multivariate Normal Density         T       First Exam         d       Partial Correlation Coefficien         d       Coefficient of Determination	Learning method Theory Theory Theory Theory Theory Theory Theory	Evaluation method General questions an discussion General questions, 3discussion or ily exa General questions an discussion General questions, discussion or daily exa General questions an discussion General questions an discussion General questions an discussion General questions an discussion			
1 2 3 4 5 6 7 8 9	Hou rs 3 3 3 3 3 3 3 3 3 3 3 3	Required Learning Outcomes Introducing the stud to Matrix operation Introducing the stud to Vector operation Introducing the stud to Rank of matri Introducing the stud to Characteristic rea and vectors of a ma Introducing the stud to Multivariate Non Density First Exam Introducing the stud to Partial Correlat Coefficient Introducing the stud to Coefficient o Determination Introducing the stud to MLE properties mean and covarian	Unit or subject name         dd       Matrix operation         dd       Vector operations         dd       Rank of matrix         dd       Rank of matrix         dd       Characteristic roots and vectors matrix         dd       Multivariate Normal Density         m       First Exam         dd       Partial Correlation Coefficien         dd       Coefficient of Determination         f       MLE properties of mean and covariance	Learning method Theory Theory Theory Theory Theory Theory Theory Theory	Evaluation method General questions an discussion General questions, 3discussion or ily exa General questions an discussion General questions, discussion or daily exa General questions an discussion General questions, discussion General questions an discussion General questions an discussion			

		to normalization				discussion or daily example
11	3	Second exam	Secor	id exam	Theory	General questions an discussion
12	3	Introducing the stude	Un	biased	Theory	General questions,
	_	to Unbiased				discussion or daily exa
13	3	Introducing the stude	Confidence int	erval for varian	Theory	General questions an
		to Confidence interv				discussion
	0	Ior varianc	Confidence	ntarrial for ratio	Theory	Conoral quastiona
14	3	to Confidence interv	Confidence		Theory	discussion or daily ex
		for ratio				
15	3		appl	ications	Theory	
16	3	Final exam	Fina	ll exam	Editorial	Editorial
			199. Course	e Evaluatior	ו	
Distr	ibuting	g the score out of 1	00 according	to the tasks a	ssigned to the	e student such as
	dai	ly preparation, dai	ly oral, month	ly, or writter	n exams, repo	rts etc
The dis	tributi	on of the grade out	of 100 accord	ding to the ta	sks assigned	by the student, and
		the co	urse grade is	divided as fo	llows:	
1-ten g	rades (	on a number of acti	vities: commi	tment to dail	v nrenaration	n participation and
1 1011 5	luues	activity inside th	o Hall propar	ation of rend	rte Daily eva	me
		2_15+	h grado ovam	of the first m	onth	
		2-1JL 2 15th	arada ayam a	f the second	month	
		3-150	grade exam o	i the second	monun.	
			4-60th grade	e final exam.		
		200. Le	arning and	Teaching Ro	esources	
Req	uired te	extbooks (curricular	books, if any)	Foreign b	ooks about M	Iultivariate Statistica
	М	ain references (sou	rces)	Anderson	, T.W; (1981)	; "An Introduction
		<b>v</b>	,	Multivaria	te Statistical A1	nalysis''; John Willey and
					Sons, Nev	v-York.
				Hardle, W. &	z Simar, L.; (20	(07); "Applied Multivar
				Stausuca Kandall M	1 analysis"; Spri M.C. • (1986)• "A	nger, dernn , Germany Course in Multivariate
				An	alysis"; Mc-Gro	w Hill, New-york
Re	comme	ended books and re	ferences	All scientif	fic journals, p	eriodicals that conta
	(scier	itific journals, report	s)	informa	tion about Mi	iltivariate Statistical)
	Elect	ronic References, V	Vebsites	All websites	s specialized i	n Multivariate Statisti
	-					

201. C	ourse Name:				
Multivariate Statistical (1)					
202. (	Course Code:				
203. Set	mester / Year:				
2024-	2023				

204. Description Preparation Date:2024/3/20							
20/3/2024							
205. Available Attendance Forms:							
			Official attenda	nce			
	206	. Number o	f Credit Hours (Total) / N	Number of U	Inits (Total)		
	207	Course adm	45 nours and 3 u	nits tion all if m	ore than one		
4	207.	Course aun	name)	nion an, n n			
		Name: As	ssit.Professor Dr. bahr k	adhim moh	ammed		
		H	Email: bahr.mahemmed	@qu.edu.iq			
			208. Course Object	ives			
	Course	Objectives	Application to actual data	/ Assigning st	udents to read the		
			topic in advance from seven the course	cal scientific s	ources relevant to		
			• After teaching the sub	ject, the resea	rcher can help		
			researchers in various di	fferent scienti	fic applications		
		•	• Being able to analyze data	and draw co	nclusions that help		
			unem make : Students prepare brief rer	a sound decision or some	topics and discuss		
			them in	the lecture	topics and alseass		
			• Prac	ctical exercises	8		
		209.	Teaching and Learning	g Strategies			
St	rategy						
		1 How to measu	the levels of (the topic) ac	cording to the	available data and		
		2- How	to use statistical programs s	uch as SPSS. I	MINTAB.		
		3- Graduating t	he student with knowledge o	f this importan	t applied subject in a		
			research fie	elds			
			210. Course Structure				
Week	Hou	Required	Unit or subject name	Learning	Evaluation		
	rs	Learning		method	method		
		Outcomes					
1	3	Introducing the stud	Tests of MVN concerning mea	Theory	General questions a		
		concerning mean	s		aiscussion		
2	3	Introducing the stud	Case (A), Case (B) and Case (	Theory	General questions		
		to Case (A), Case ( and Case (C			3discussion or ily ex		
3	3	Introducing the stud	Hotelling test	Theory	General questions a		
	2	Introducing the stud	Mahalanobis test	Theory	General questions		
4	≺	mitodadenig the stad			deneral quebelone		

5	3	Introducing the stude	Test of	Correlation	Theory	General questions an discussion
6	3	First Exam	First	t Exam	Theory	General questions,
7	3	Introducing the stude	Factor	Factor Analysis		General questions an
8	3	Introducing the stude	Discrimin	ant Analysis	Theory	General questions,
9	3	Introducing the stude	Cluster	r Analysis	Theory	discussion or daily exa General questions an
10	3	to Cluster Analysis Introducing the stude	Canonic	cal analysis	Theory	discussion General questions,
10	0	to Canonical analys		_		discussion or daily exa
11	3	Second exan	Secon	d exam	Theory	General questions an discussion
12	3	Introducing the stude to Profile Analysis	Profile	e Analysis	Theory	General questions, discussion or daily exa
13	3	Introducing the stude	Speci	al Topics	Theory	General questions an
14	3	Introducing the stude	Speci	al Topics	Theory	General questions,
		to Special Topics				discussion or daily exa
				1		
15	3	to Special Topics	Speci	al Topics	Theory	
16	3	Final exam	Fina	al exam	Editorial	Editorial
			211. Course	e Evaluatio	n	
Distr	ibuting	g the score out of 1	00 according	to the tasks a	assigned to the	e student such as
	dai	ly preparation, dai	ly oral, month	ly, or writte	n exams, repo	rts etc
The dis	stributi	on of the grade out	t of 100 accor	ding to the ta	asks assigned	by the student, and
		the co	ourse grade is	divided as fo	ollows:	
1-ten g	rades o	on a number of act	ivities: commi	tment to dai	ly preparation	, participation and
		activity inside th	ie Hall, prepar b grade exam	of the first n	orts, Daily exal	ms.
		3-15th	grade exam	f the second	month.	
			4-60th grade	e final exam.		
		212. Le	earning and <sup>-</sup>	Teaching R	esources	
Req	uired te	extbooks (curricular	books, if any)	Foreign b	ooks about M	ultivariate Statistica
	М	ain references (sou	rces)	Andersor Multivaria	n, T.W; (1981) te Statistical Ar	; "An Introduction t alysis"; John Willey an
				Hardle, W. & Statistica Kandall	50ns, Nev & Simar, L. ; (20 dl analysis''; Spri M C • (1986)• ''A	v- 1 0rK. 07) ; ''Applied Multivar nger, Berlin , Germany Course in Multivariate
				An	alysis"; Mc-Gro	w Hill, New-york
Re	comme	ended books and re	ferences	All scienti	fic journals, pe	eriodicals that conta
	(scien	tific journals, report	s)	informa	tion about Mu	intivariate Statistical )
	Elect	ronic References, V	Vebsites	All websi	tes specialized	in Multivariate Statistica

<b>Course Description Form</b>						
213. Course Name:						
Statistical applications1						
			214.	Course Code:		
			215.	Semester / Year	:	
				2023-2024		
			216. Des	cription Preparatio	n Date:	
			,	22-3-2024		
			217. Avai	lable Attendance Fo	rms:	
				In class		
	21	8.	Number of Credit I	Hours (Total) / Numl	per of Units (Tot	al)
				3 hours		
4	219.	(	Course administrato	r's name (mention name)	all, if more tha	n one
			Nam	ie: mayyadah.j.kadi	m	
			Email: ma	yyadah.j.kadim@qı	ı.edu.iq	
			220.	Course Objectives		
Cou	urse Ob	ojectiv	es • Enabling the stude	ent to know the analysis and	interpretation of the re	esults of
			statistical analysis through the theoretical as well as the applied aspect			
			The student's knowledge in writing special and general programs for all science			
			problems, with the c	concept of simulation that give	ves an understandable	character
				to real data and how to d	eal with it.	
			<ul> <li>Enabling the student to employ the electronic calculator in applying and using statistical methods and techniques and adopting speed and accuracy in analyzing</li> </ul>			
statistical methods and techniques and adopting speed and accuracy in a			n analyzing			
						Julems.
			221. Teachi	ng and Learning Stra	alegies	
Str	ategy	1- Brainstorming strategy				
				2- Discussion st	rategy	
3- E-learning strategy						
222 Course Structure						
Week Hours F		rs	Required Learning	Unit or subject	Learning	Evaluati
			Outcomes	name	method	on
						method
1.		3	Introducing the student to the ordinary least squares method for simple linear	Ordinary least squares method for simple linear regression using	Lectures Example solutions	Discussio Daily exar Homewor
	regression using MATLAB MATLAB					

2.	3	Introducing the student to	Analysis of variance for	Lectures	Discussio
		the analysis of variance of the simple linear regression	a simple linear	Example solutions	Daily exar
		model and the test of	test of significance and		TIOINE WO
		significance and the	coefficient of		
		coefficient of determination	determination using		
		using the MATLAB	MATLAB		
0		program	Conorol logat aquaras	Lasturas	Diamaria
3.	3	the general least squares	method for general	Example solutions	Discussio Daily exat
		method for the general	linear model using	Example solutions	Homewor
		linear model using the	MATLAB program		
		MATLAB program			
4.	3	Introducing the student to	Analysis of variance in	Lectures	Discussio
		analysis of variance in the	the case of the general	Example solutions	Daily exar
		model and the general	general coefficient of		Homewor
		coefficient of determination	determination using		
		using the MATLAB	MATLAB		
		program			
5.	3	Introducing the student to	Polynomial models	Lectures	Discussio
		MATLAB	using MATLAD	Example solutions	Homewor
6	3	Introducing the student to	Subprograms (M-File	Lectures	Discussio
0.	5	subprograms (M-File	function)	Example solutions	Daily exar
		function)			Homewor
7.	3	Introducing the student to	Economic measurement	Lectures	Discussio
		the problems of economic	problems for regression	Example solutions	Daily exar
		models, the problem of	heterogeneity of		nomewo
		heterogeneity of variance or	variance or Spearman's		
		the Spearman rank	rank correlation test		
		correlation test		-	
8.	3	Introducing the student to	The autocorrelation	Lectures	Discussio Deily aver
		the Durbin-Watson test and	Watson test and the	Example solutions	Homewor
		the iteration method to solve	iteration method to solve		1101110 W O
		the autocorrelation problem	the autocorrelation		
			problem		
9.	3	Introducing the student to	Data chart using	Lectures	Discussio
		MATI AB	MAILAD	Example solutions	Homewor
10	3	Introducing the student to	Applied cases, case	Lectures	Discussio
10.	5	applied cases, case studies	studies of the principles	Example solutions	Daily exar
		of the principles of statistics,	of statistics, and a case		Homewor
		and a case study simulating	study simulating student		
11		student results	results Casa studios of time	Locturos	Disquesio
11.	3	case studies of time series	series	Example solutions	Daily exat
					Homewor
12.	3	Introducing the student to a	Case study of numerical	Lectures	Discussio
	-	case study of numerical	analysis Newton-	Example solutions	Daily exar
		analysis using the Newton-	Raphson method		Homewor
10	n	Introducing the student to a	Case study chi-square	Lectures	Discussio
13.	3	case study, Chi-square test	test	Example solutions	Daily exat
				r	Homewor
14.	3	Introducing the student to	Case studies simulating	Lectures	Discussio
		case studies simulating the	the generation of a given	Example solutions	Daily exam
		generation of a specific	distribution		Homewor
		uistiibuuoli			

15.	3	Intro	oducing the student to a ase study of one-way analysis of variance	Case study one-way analysis of variance	Lectures Example solutions	Discussio Daily exar Homewor		
	223. Course Evaluation							
Annu	Annual endeavor = daily preparation and absences 10 marks + monthly exams 30 = 40 Final exam = 60							
			224. Learning a	nd Teaching Resou	rces			
Requ	ired textb	ooks						
(curricu	lar books	, if ai						
Mai	n referen	ces	1. Al-Tamimi, Ra	ad Fadel Hassan, (201	4): "Principles of A	oplied		
	(sources)		Statistics", Al-Hadia Office for Statistical Analysis and Information					
				Technology, Baghda	d-Iraq.			
			2. Al-Hasnawi, Ar	mory Hadi and Muslim,	Bassem Shaliba, (2	2002):		
			"Advanced Ec	onomic Measurement 7	Theory and Applicati	on",		
				Spectrum Press, Bagh	dad-Iraq.			
			3. Al-Rawi, Khashi M	/lahmoud, (1984), "Intr	oduction to Statistic	s", Mosul		
				Press, University of	Mosul.			
			4. Salama, Ahmed	Afifi, (2006): "The MAT	LAB course, step b	y step,"		
				Arab Engineers Fo	prum.			
			5. Jijan, Fadila Ali a	nd Muhammad, Alia H	ashem, (2016), "An	alysis of		
			Regression Mode	Is Using the MATLAB I	Program," Al–Simaa	Press,		
				Baghdad, Al-Mutanab	bi Street.			
			6. Abdel-Maboud, A	min, (2005): "MATLAE	3 in the blink of an e	eye", Dar		
			Al-Farouk f	or Publishing and Distr	ibution, Cairo, Egyp	t.		
			7. Al-Adawy, Moha	imed Ibrahim, Salem, N	lancy, and Fouad, I	Hassan,		
			(2018): "Introd	uction to MATLAB, Tea	ach Yourself," Facul	ty of		
				Engineering, Helwan L	Iniversity.			
			8. Ghani, Ali Yass	sin, (2017): "Introductio	on to MATLAB", AI-	Simaa		
			Press -	Al-Mutanabbi Street -	Baghdad - Iraq.			
			9. Al-Hindi, Khaled	Abdel Hamid, (2007),	"Introduction to the	program		
			in N	/ATLAB:, Umm Al-Qui	ra University.			
Reco	mmendeo	b	1. Sheet, Abdul I	Karim Ibrahim, (2010):	"Introduction to Rar	ndom		
boo	oks and		Number Generators and the Simulation Method," Tikrit Journal of Pu			I of Pure		
referenc	es (scien	tific	Sciences, Volume 15, Issue 1.					
journals	s, reports.	)	2. Jassim, Wael Abo	lel Latif, (2009): "A Sin	nulation Study of the	e Central		
			Purpose Theory	of Exponential Familie	es," Tikrit Journal of	Pure		
			S	Sciences, Volume 14, N	Number 3.			

Websites

225. Course Name:
Statistical applications2
226. Course Code:
227. Semester / Year:
2023-2024
228. Description Preparation Date:
22-3-2024
229. Available Attendance Forms:
In class
230. Number of Credit Hours (Total) / Number of Units (Total)
3 hours
231. Course administrator's name (mention all, if more than one
name)
Name: mayyadah.j.kadim
Email: mayyadah.j.kadim@qu.edu.iq
232. Course Objectives
• Enabling the student to know the analysis and interpretation of the results of
statistical analysis through the theoretical as well as the applied aspect
The student's knowledge in writing special and general programs for all science
problems, with the concept of simulation that gives an understandable character
to real data and how to deal with it.

			Enabling the student statistical methods and and interpreting the	t to employ the electronic of t techniques and adopting e results derived from deal	calculator in applying a speed and accuracy ir ing with real-world pro	nd using a analyzing oblems.		
233. Teaching and Learning Strategies								
Strategy			4- Te 234. Co	<ol> <li>1- Brainstorming</li> <li>2- Discussion st</li> <li>3- E-learning st</li> <li>eaching strategy w</li> <li>urse Structure</li> </ol>	strategy rategy rategy rith examples			
Week	Hou	rs	Required Learning	Unit or subject	biect Learning Evaluati			
	Tiours		nouis		Outcomes	name	method	on
						method		
16.		3	Introducing the student to a general introduction to the MATLAB program	General introduction to MATLAB	Lectures Example solutions	Discussion Daily example Homewor		
17.	3		Introducing the student to methods of entering and importing data	Methods of entering and importing data	Lectures Example solutions	Discussion Daily exam Homewo		
18.	3		3		Introducing the student to recursive loops and conditional sentences	Loops and conditional statements	Lectures Example solutions	Discussio Daily exa Homewo
19.	3		3		Introducing the student to matrices and general programs	Arrays and general programs	Lectures Example solutions	Discussio Daily exa Homewo
20.	3		Introducing the student to methods for generating random numbers (random experiment, random number tables, the middle square method, the middle factorial method, the Fibonacci method)	Methods of generating random numbers (random experiment, random number tables, mean square method, middle factorial method, Fibonacci method)	Lectures Example solutions	Discussio Daily exa Homewo		
21.	3		3		Introducing the student to the linear matching method, the rand generating function	Linear matching method, rand generating function	Lectures Example solutions	Discussio Daily exa Homewo
22.	3		Introducing the student to methods for generating random variables for continuous and discrete distributions	Methods for generating random variables for continuous and discrete distributions	Lectures Example solutions	Discussio Daily exa Homewo		
23.	3		Introducing the student to the inverse transformation method for generating variables	Inverse transformation method for generating variables	Lectures Example solutions	Discussio Daily exa Homewo		
24.	3		Introducing the student to generating observations from a random variable that follows a continuous uniform distribution	Generating observations from a random variable that follows a continuous uniform distribution	Lectures Example solutions	Discussio Daily exar Homewo		
25.	3		Introducing the student to generating observations from a random variable that follows an exponential distribution	Generating observations from a random variable that follows an exponential distribution	Lectures Example solutions	Discussio Daily exa Homewo		

26.	3	Introdu generating	the student to g observations from variable that follows	Generating observations from a random variable that	Lectures Example solutions	Discussio Daily exar Homewor
		the We	bull distribution	follows a Weibull distribution		Homewor
27.	3	Introducii Box-N gener	ng the student to the filler method for rating variables	Box-Miller method for generating variables	Lectures Example solutions	Discussio Daily exar Homewor
28.	3	Introducin centr	ng the student to the al goal method	Central goal method	Lectures Example solutions	Discussio Daily exar Homewor
29.	3	Introducin to gener ready-r	g the student to how rate data using the nade functions of MATLAB	How to generate data using ready-made functions in MATLAB	Lectures Example solutions	Discussio Daily exar Homewor
30.	3	Introduc repeat	cing the student to the experiment	Repeat the experiment	Lectures Example solutions	Discussio Daily exar Homewor
			235. Cou	Irse Evaluation		
Annı	ial endea	vor = dail	y preparation and Final	l absences 10 marks exam = 60	+ monthly exams 3	30 = 40
		2	36. Learning an	d Teaching Resou	rces	
Re	equired tex	tbooks				
(curri	cular bool	ks, if any				
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	2. Jassim, Wael Abdel Latif, (2009): "A Simulation Study of the
	Central Purpose Theory of Exponential Families," Tikrit Journal of
	Pure Sciences, Volume 14, Number 3.
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Websites	