



## Course Specifications

<b>Course Title:</b>	BUSINESS STATISTICS II
<b>Course Code:</b>	STAT1221
<b>Program:</b>	Finance and Banking
<b>Department:</b>	Finance and Banking
<b>College:</b>	College of Business Administration
<b>Institution:</b>	Dar AlUloom University

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## A. Course Identification

<b>1. Credit hours:</b>			
<b>2. Course type</b>			
a.	University <input type="checkbox"/>	College <input checked="" type="checkbox"/>	Department <input type="checkbox"/> Others <input type="checkbox"/>
b.	Required <input checked="" type="checkbox"/>	Elective <input type="checkbox"/>	
<b>3. Level/year at which this course is offered:</b> Level 4/ Fourth Semester			
<b>4. Pre-requisites for this course (if any):</b> STAT 1211			
<b>5. Co-requisites for this course (if any):</b> None			

### 6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	45	100%
2	Blended		
3	E-learning		
4	Distance learning		
5	Other		

### 7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	Lecture	35
2	Laboratory/Studio	
3	Tutorial	10
4	Others (specify)	
	Total	45

## B. Course Objectives and Learning Outcomes

### 1. Course Description

Business Statistics II designed to focus on Sampling and inferential statistics. The topics covered in the course include review of probability distribution, central limit theorem, sampling distribution, point and interval estimation. The course also covers hypothesis testing and statistical inference using Z-test and t-test about the mean and proportion, Chi-square test & F-test about the variance and Chi-square tests for goodness of fit and independence. Finally, the course covers simple linear correlation and linear regression equation with their applications.

### 2. Course Main Objective

- Demonstrate the methods for sampling distributions of the mean, proportion and variance.
- Provide basic knowledge about inferential statistics for the purpose of making effective business decisions.
- Introduce point and interval estimation about the mean, proportion and variance of one population
- Introduce hypothesis testing about the mean, proportion and variance of one population
- Extended the point and interval estimation for the difference of the means, proportions and variances' ratio of two population
- Extended the hypothesis testing for the difference of means, proportions and variances' ratio of two population
- Chi-square tests for goodness of fit and independence populations.
- Linear correlation (Pearson coefficient) and linear regression equation with their applications.

### 3. Course Learning Outcomes

CLOs		Aligned PLOs
<b>1</b>	<b>Knowledge and Understanding</b>	
1.1	Recognize the major techniques of Sampling, estimating and hypothesis tests	K.1
1.2	Recognize the major techniques of Correlation, regression, Goodness of Fit and Independence tests.	K.2
<b>2</b>	<b>Skills :</b>	
2.1	Analyze statistical information about populations in the context of real-world settings.	S.1
2.2	Construct and interpret the results of Sampling, estimating, hypothesis, Goodness of Fit, Independence tests, correlation and regression models.	S.5
<b>3</b>	<b>Values:</b>	
3.1	Demonstrate high self-esteem, building constructive business relationship. Illustrate team skills to work in groups for assigned tasks.	V.1
3.2	Show accountability for their own learning and scientific work by being independent and self-directed learners.	V.2
3.3	Illustrate team skills and information technology skills in communication and in using statistical applications in SPSS to work in groups for case study and projects.	V.3

## C. Course Content

No	List of Topics	Contact Hours
1	Sampling Distribution and Central Limit Theorem.	5
2	Point estimation and Confidence Intervals for mean, proportion and variance.	7
3	Hypothesis testing about mean , proportion and variance	7
4	Point and Interval estimation of the difference of means, proportions and variances' ratio for two populations.	7
5	Hypothesis testing about the difference of means , proportions and variances' ratio for two populations.	7
6	Chi-Square tests for Goodness-of-Fit and Independence.	6
7	Linear correlation and linear regression equation with their applications.	6
<b>Total</b>		<b>45</b>

## D. Teaching and Assessment

### 1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
<b>1.0</b>	<b>Knowledge and Understanding</b>		
1.1	Recognize the major techniques of Sampling, estimating and hypothesis tests	Direct	Exams Quizzes Assignments
1.2	Recognize the major techniques of Correlation , regression ,Goodness of Fit and Independence tests.	Direct	Exams Quizzes Exercises
<b>2.0</b>	<b>Skills</b>		
2.1	Analyze statistical information about populations in the context of real-world settings.	Direct Indirect	Exams Quizzes Assignments Project
2.2	Construct and interpret the results of Sampling ,estimating,hypothesis,Goodness of Fit, Independence tests, correlation and regression models.	Direct Indirect	Exams Quizzes Assignments Project
2.3	Analyze statistical information about populations in the context of real-world settings.	Direct Indirect	Exams Quizzes Exercises
<b>3.0</b>	<b>Values</b>		
3.1	Demonstrate high self-esteem, building constructive business relationship Illustrate team skills to work in groups for assigned tasks.	Interactive	Group Projects Assignments
3.2	Show accountability for their own learning and scientific work by being independent and self-directed learners.	Interactive	project / case study
3.3	Illustrate team skills and information technology skills in communication and in using statistical applications in SPSS to work in groups for case study and projects.	Interactive instruction	Assignments / project

## 2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Quiz	continuous	10%
2	Homeworks / Assignment	continuous	10%
3	project & Participation	continuous	10%
4	Mid term	9	30%
5	Final Exam	16	40%

\*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

## E. Student Academic Counseling and Support

**Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice :**

1. Eight Office hours weekly can be booked through the students' SIS account.
2. Online discussion through the LMS forums and instant messaging.
3. Instructure email available in the course syllabus.
4. Occasional mobile calls or SMS for urgent messages.
5. Online discussion , instant messaging and calls through the MS Teams.

## F. Learning Resources and Facilities

### 1. Learning Resources

<b>Required Textbooks</b>	Statistics for Business and Economics - 5th edition David Anderson; Dennis Sweeney; Thomas Williams; James Freeman; Eddie Shoemith <a href="http://www.cengage.com">www.cengage.com</a>
<b>Essential References Materials</b>	Research paper from Journals, Articles from Magazines will be provided
<b>Electronic Materials</b>	Study materials are available through online resources available from the publisher. <a href="http://www.cengage.com">www.cengage.com</a>
<b>Other Learning Materials</b>	Microsoft Excel and SPSS

### 2. Facilities Required

Item	Resources
<b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)	Classroom and Laboratories.
<b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)	Data show, smart boards and software.
<b>Other Resources</b> (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	Internet access point.

## G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
End of semester Course Evaluation.	Students	Indirect
Effectiveness of teaching and assessment.	Peer reviewer	Indirect
Course learning outcomes assessment.	Faculty members	Direct
Quality of learning resources	Students Faculty members	Indirect

**Evaluation areas** (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)

**Evaluators** (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify))

**Assessment Methods** (Direct, Indirect)

## H. Specification Approval Data

Council / Committee	Finance and banking Department (Second semester 2021/2022)
Reference No.	Meeting number 3
Date	March 17, 2022

