

# **Course Specifications**

<b>Course Title:</b>	Business Statistics II
Course Code:	MGT 113
Program:	BSBA
Department:	Management
College:	<b>College of Business Administration</b>
Institution:	Prince Sattam Bin Abdulaziz University







# **Table of Contents**

A. Course Identification	
6. Mode of Instruction (mark all that apply)	3
B. Course Objectives and Learning Outcomes	
1. Course Description	3
2. Course Main Objective	3
3. Course Learning Outcomes	4
C. Course Content	
D. Teaching and Assessment5	
1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods	5
2. Assessment Tasks for Students	5
E. Student Academic Counseling and Support6	
F. Learning Resources and Facilities6	
1.Learning Resources	6
2. Facilities Required	6
G. Course Quality Evaluation7	
H. Specification Approval Data7	

# A. Course Identification

1. Credit hours:		
2. Course type		
<b>a.</b> University College $$ Department Others		
D. Required Elective		
3. Level/year at which this course is offered: IV / Second Year		
4. Pre-requisites for this course (if any): Business Statistics-1 (MGT 110)		
5. Co-requisites for this course (if any): N / A		

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

No	Mode of Instruction	<b>Contact Hours</b>	Percentage
1	Traditional classroom	40	90
2	Blended		
3	E-learning	4	10
4	Distance learning		
5	Other		

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

No	Activity	<b>Contact Hours</b>
1	Lecture	44
2	Laboratory/Studio	
3	Tutorial	
4	Others (specify)	
	Total	44

#### **B.** Course Objectives and Learning Outcomes

**1. Course Description :** The purpose of this course (a continuation of Business Statistics-1) is to improve the student's decision making ability by improving his ability in statistical analysis of business problems, and to improve his ability for scientific research. The following topics will be discussed in depth: correlation, simple and multiple linear regressions, estimation (point estimates and interval estimates), hypothesis testing, chi-square and analysis of variance.

#### 2. Course Main Objective

- Compute, illustrate and interpret the correlation, simple and multiple linear regressions.
- Demonstrate and interpret the estimation.
- Compute, illustrate and interpret the hypothesis testing.
- Compute, illustrate and interpret the non-parametric test.
- Demonstrate and interpret the analysis of variance.

# **3. Course Learning Outcomes**

	CLOs	Aligned PLOs
1	Knowledge and Understanding	
1.1	List methods for the analysis and synthesis of data using a range of mathematical techniques, supported by appropriate software to inform business decision	K2
1.2	Recognize the process and practices for the effective management of organizations and decision making within them	K6
1.3		
1		
2	Skills :	
2.1	Analyse, synthesize and apply the knowledge and understanding of concepts and theories described in the knowledge category above to business problems	C2
2.2	Create, evaluate and assess arrange of options together with the capacity to apply ideas and knowledge to a range of business situations using appropriate quantitative and qualitative skill.	C3
2.3	Interpret, extrapolate, including data analysis, to issues and problems in business by applying numeracy and quantitative skill.	C4
2.4		
3	Values:	
3.1	Effective work in solving numerical exercises.	
3.2		
3.3		
3		

# **C.** Course Content

No	List of Topics	Contact Hours
1	<b>Correlation and Regression Analysis:</b> The concept of correlation, Calculation of Correlation coefficient: Scatter diagram method, Karl Pearson's correlation coefficient; Spearman's rank correlation, correlation versus regression, Simple linear regression equation, Introduction to multiple regression.	10
2	<b>Theory of Estimation:</b> Point estimates and confidence intervals, confidence interval estimates for population mean ( $\sigma$ known, $\sigma$ unknown), determining the required sample size for estimating a population mean, confidence interval estimate for population proportion, determining the required sample size for estimating a population proportion.	12
3	<b>Hypothesis Testing:</b> Re-conceptualizing the notion of hypothesis testing, Z-test: testing Mean; difference between the Means; Sample Proportion; difference between the Proportions, Student's t- test: testing Mean; difference between the Means; Paired t- test, Significance testing of Correlation Coefficient, P value approach.	8
4	Non Parametric Chi-Square Test: Chi square for one sample variance. Chi- square test as goodness of fit test, Chi-square test for independence of attributes	8
5	Analysis of Variance (ANOVA): F-test for two population variances. One-way analysis of variance.,.	6

Total	44

### **D.** Teaching and Assessment

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

Code	<b>Course Learning Outcomes</b>	<b>Teaching Strategies</b>	Assessment Methods
1.0	Knowledge and Understanding		
1.1	List methods for the analysis and synthesis of data using a range of mathematical techniques, supported by appropriate software to inform business decision (@ K-2)	Class Lectures	Quizzes Assignments Exams
1.2	Recognize the process and practices for the effective management of organizations and decision making within them. (@ K-6)	Class Lectures	Quizzes, Assignments and Exams
2.0	Skills		
2.1	Analyse, synthesize and apply the knowledge and understanding of concepts and theories described in the knowledge category above to business problems (@ C-2)	Class lectures Solving numerical questions	Quizzes, Assignments and Exams
2.2	Create, evaluate and assess arrange of options together with the capacity to apply ideas and knowledge to a range of business situations using appropriate quantitative and qualitative skill. $(@, C-3)$	Class lectures	Assignments and Exams
2.3	Interpret, extrapolate, including data analysis, to issues and problems in business by applying numeracy and quantitative skill. (@ C-4)	Class lectures Solving numerical questions	Assignment and Exams
2.4			
2.5			
3.0	Values		
3.1	Analyse, synthesize and apply the knowledge and understanding of concepts and theories described in the knowledge category above to business problems (@ C-2)	Class lectures Solving numerical questions	Quizzes, Assignments and Exams
3.2			

#### **2.** Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Assignments	At least 2 Assignments	10
2	Mid Term Examination-1	5th	15

#	Assessment task*	Week Due	Percentage of Total Assessment Score
3	Mid Term Examination-2	10th	15
4	Quizzes	At least 2 Quizzes	10
5	Final Examination	15th	50
6	Total		100
7			

\*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 :

Office hours: 6 hrs/week

# **F. Learning Resources and Facilities**

#### **1.Learning Resources**

8	
Required Textbooks	David F.Grolbner, Patrick W.Shannon, Phillip C.Fry, & Kent D.Smith (2008), Business Statistics: A Decision Making Approach, Pearson- Prentice Hall, N.J.
Essential References Materials	Farouk Benghezal (2011), Statistics for Business, Arab world Edition, Pearson Education Limited, ISBN:978-1-4082-6980-0 Ken Black (2007), "Business Statistics for Contemporary Decision Making", John Wiley & Sons, 4/E.
Electronic Materials	http://home.ubalt.edu/ntsbarsh/Business-stat/opre504.htm http://en.wikipedia.org/ http://www.statsoft.com/textbook/basic-statistics/ http://apastyle.apa.org/ http://www.docstyles.com/
Other Learning Materials	MS Excel and the relevant websites

#### 2. Facilities Required

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

# **G.** Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	<b>Evaluation Methods</b>
Teaching Evaluation	Students	Indirect
Course Evaluation	Students	Indirect
Learning Resource evaluation	Students	Indirect
Achievements of Learning Outcomes	Students	Indirect
Faculty Evaluation	Head of the Department	Direct
Peer-evaluation	Peer faculty Member	Direct

**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	
Reference No.	
Date	