

PRINCIPLES OF BUSINESS STATISTICS

Course No	:	BUS 104
Course Title	:	PRINCIPLES OF BUSINESS STATISTICS
Prerequisites	:	BUS 102
Course Type	:	Major
Faculty Member	:	Dr. ; Room # ; Telephone ; e-mail ;
Office Hours	:	
Class Time	:	
Lecture Class	:	

Course Objectives:

The fundamental objectives of this course are to make students understand the basic statistical concepts and techniques and how they can be applied in the field of business and economics as modern managers. The aim of the course is to build students' statistical back ground and to give them the statistical skills necessary to meet the needs of business and the real-world decision-making problems.

Course Description:

This course will introduce the basic concepts and methods of statistics, as applied to business and computing. It introduces the use of statistical methods and tools in evaluating research data for business applications. Emphasis is placed on basic probability, measures of spread and dispersion, central tendency, sampling, regression analysis, and inductive inference

Course Outline:

1. Introduction; Variables; Examining Data and Distributions
2. Examining Data and Distributions; Electronic Spreadsheet and Minitab
3. Examining Relationships Regression
4. Numerical Description of Data : Mean Deviation, Variance, Standard Deviation, Empirical Rule, Chebychev's Rule, Skewed Distribution, Pearson's Coefficient of Skewness
5. Producing Data; Probability and Sampling Distributions
6. Probability and Sampling Distributions; Binomial distribution: Discrete & Continuous Random Variable, Probability Distribution, Cumulative probability Distribution
7. Confidence Intervals: Point Estimate, Confidence Interval, Proportion, Standard Error of the Sample Proportion
8. Inference for Distributions
9. Inference for Proportions; Inference for Two-Way Tables

Learning Outcomes:

Upon successful completion of the course, the student should be able to:

1. To know when and how statistical analysis might be useful
2. To choose between statistical techniques and interpret and evaluate the validity of work based on inappropriate techniques.
3. To interpret the results of statistical analysis
4. Students should be able to apply statistical problem solving to business.

Skills to be developed:

This course helps students in developing the following skills:

1. **Communication** (Oral & written) **Through Assignments, Case Study discussions and examinations**
2. **Analytical** **Through Case studies and examinations**
3. **Team Work** **Through Case studies**
4. **Creative Thinking** **Through Case studies, assignments, classroom discussions**
5. **Adaptability to Change** **Through Case studies, and examinations**
6. **Ethics** **Through lectures and assignments**
7. **Use of Information Technology** **Through use of PCs, Internet, CD-ROM, Statistical data base in the library**

Evaluating Student Performance:

Class participation and attendance	10%
Individual assignments /or/ Tests (two)	40%
Final Exam	50%

Assignment	LO1	LO2	LO3	LO4
Class Assignments	X	X	X	
Mid-term exam	X	X	X	
Project		X		X
Final exam	X	X	X	

Grading:

Percentage Score	Letter Grade	GPA Points	Percentage Score	Letter Grade	GPA Points
90 - 100	A	4.0	70 - 74	C	2.0
85 - 89	B+	3.5	65 - 69	D+	1.5
80 - 84	B	3.0	60 - 64	D	1.0
75 - 79	C+	2.5	< 60	F	0.0

Educational Resources:

<i>Educational Resource</i>	Description	Comments
Textbooks Required	The Practice of Business Statistics Using Data for Decisions, by Moore, McCabe, Duckworth and Sclove, Freeman and Company, latest edition. Basic Statistics for Business & Economics, 4 th ed; by Lind/ Marchal / Wathen	
References	Understanding Statistics by Naiman, Rosenfeld, and Zirkel 4 th ed., McGraw Hill ISBN# 0-07-045915-0 Websites on Statistics and Business	
Computers	Internet searches for obtaining info on Statistics.	
CD - ROM :	(CD-ROM) data base in the library + Action learning through CD Accompanying the textbook	
Other Resources:	Library resources, Internet search of periodicals	

Course Schedule & Outline:

Sixteen Week Semester, 3 hrs/Wk

Date	Week	Outline Syllabus	Learning Outcomes	Homework Assignments, Due dates
February 12/2-16/2	1		LO1	
February 19/2-23/2	2		LO2	
May 28/5- 31/5		General Review		