

# **Faculty of Commerce & Business Administration**

## **Statistical Computing Methods**

#### Information:

Course Code: MST 267 Level: Undergraduate Course Hours: 3.00- Hours

**Department:** Faculty of Commerce & Business Administration

Instructor	Information :	
		_

Title	Name	Office hours
Associate Professor	Mahmoud Mostafa Rashwan Abd Elnaser	
Teaching Assistant	Silvia Alber Shawky Bishay	4

## Area Of Study:

Inferential Statistics introduces basic information on estimation and testing hypothesis it assumes only basic knowledge of business Statistics Eventually it's an approach for data analysis & decision making helped by computer software using parametric & non parametric statistical techniques. Finally some linear & non linear regression models are introduced.

#### **Description:**

Intermediate study of statistical techniques for research problems. Analysis of variance, correlation techniques, nonparametric techniques, sampling theory. Extensive use will be made of Personal computers using the SPSS and MINITAB Statistical package to view and analyze data.

#### Course outcomes:

## a. Knowledge and Understanding: :

- 1 Understand key inferential concepts so as to have a critical insight into the appropriateness of statistical techniques.
- 2 Apply with confidence some standard parametric techniques for a wide variety of problems.
- 3 Make comparisons using ANOVA.
- 4 Learn some non-parametric statistical techniques.

## b.Intellectual Skills::

- 1 Fitting linear & nonlinear regression models.
- 2 Focus on presentation of results using suitable statistical software packages.

# c.Professional and Practical Skills: :

- 1 Use the Minitab and SPSS packages.
- 2 Deal with case studies to cover the area of Business & Management.

#### d.General and Transferable Skills::

- 1 Self-learning through exercises and worked examples.
- 2 Work in group to develop technique for problem solving.



Course Topic And Contents :			
Topic	No. of hours	Lecture	Tutorial / Practical
Sampling distribution	4	3	1
Estimations & confidence intervals for one population mean.	4	3	1
Testing hypothesis for one population mean.	4	3	1
Estimations & confidence intervals for one population proportion.	4	3	1
Testing hypothesis for one population proportion.	4	3	1
First Mid Term	4	3	1
Estimations & confidence intervals for two population mean.	4	3	1
Testing hypothesis for two population mean.	4	3	1
Estimations & confidence intervals for two population proportion.	4	3	1
Testing hypothesis for two population proportion.	4	3	1
Second Mid Term	4	3	1
ANOVA	4	3	1
Non parametric tests.	4	3	1
Multiple regression models	4	3	1
Revision	4	3	1

# **Teaching And Learning Methodologies:**

Text book

Published works related to the different subjects.

Data show and computer in lectures.

Group discussion

Course Assessment :			
Methods of assessment	Relative weight %	Week No	Assess What
1st Mid-Exam	20.00	6	
2nd Mid-Exam	20.00	11	
Attendance & Participation	20.00	13	
Final Exam	40.00	16	

Course Notes :	
Handouts	