

Faculty of Commerce & Business Administration

Statistics

Information:

Course Code: MST 201 Level: Undergraduate Course Hours: 3.00- Hours

Department: Faculty of Commerce & Business Administration

| Instructor Information : | | | | | |
|--------------------------|-----------------------------------|--------------|--|--|--|
| Title | Name | Office hours | | | |
| Lecturer | Mostafa Sayed Mostafa Abd Elhamed | 4 | | | |
| Lecturer | Mostafa Sayed Mostafa Abd Elhamed | 4 | | | |
| Assistant Lecturer | Anwaar Mahmoud Abdel Gawad Hassan | | | | |
| Teaching Assistant | Silvia Alber Shawky Bishay | 2 | | | |

Area Of Study:

Business Statistics introduces elementary ideas of descriptive and inferential statistics and statistical models. It assumes only basic knowledge of algebra and no calculus. Emphasis is on data analysis and interpretation using spreadsheet computer software, and not on computation and actual implementation of formulas. This course discusses how to efficiently collect the data needed to answer statistical questions properly, and how to address the questions in a rational way once the data is collected.

Description:

A descriptive introductory course, Frequency distributions, descriptive measures, probability, probability distributions, sampling, estimation, tests of hypotheses, regression and correlation, with applications to business.

| Course ou | itcomes: |
|-------------|--|
| a.Knowled | lge and Understanding: : |
| 1 - | Develop studentsom bility to carry out a simple exploratory data analysis; and in particular, to use simple numerical and graphical methods of summarizing data. |
| 2 - | Understand the basic definitions and concepts used in probability theory. |
| 3 - | Using probability distributions to model the behavior of variables. |
| b.Intellect | ual Skills: : |
| 1 - | Understand key inferential concepts so as to have a critical insight into the appropriateness of statistical techniques. |
| 2 - | Focus on presentation of results using suitable statistical software packages . |
| c.Professi | onal and Practical Skills: : |
| 1 - | Use the Minitab and SPSS packages. |
| 2 - | Deal with case studies to cover the area of Business & Economics. |
| 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 |
| Data Collection: Fundamental concepts of statistics, Sampling and randomization. | 4 | 3 | 1 |
| Frequency distribution, Bar charts, Pie charts. | 4 | 3 | 1 |
| Histograms, Comparing distributions. | 4 | 3 | 1 |
| Contingency tables, Scatter diagrams. | 4 | 3 | 1 |
| Numerical Description of Data: Measures of central tendency. | 4 | 3 | 1 |
| First Mid Term | 4 | 3 | 1 |
| Measures of variation. | 4 | 3 | 1 |
| Shape of a data distribution, Box plots and outliers. | 4 | 3 | 1 |
| Basic Probability: Sample space and events, Basic laws of probability, Conditional probability. | 4 | 3 | 1 |
| Random Variables and Probability Distributions: Discrete random variables, | 4 | 3 | 1 |
| Second Mid Term | 4 | 3 | 1 |
| Continuous random variables, Expected value | 4 | 3 | 1 |
| Binomial distribution, Normal distribution | 4 | 3 | 1 |
| Simple Linear Regression and Correlation coefficients. | 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 | |

