



COURSE SYLLABUS

I- Course Information

Title of the course	Statistics 2
Department	Data Science
Specialization	2 nd year – Semester 3
Web Team name	ULFI2-Fall 2021-DS-Statistics 2-S3-رياض أصاف
Academic Year	2021-2022
Semester Duration	12 teaching weeks
Credit Number	4
Number of Hours	40
Course Instructor	Dr. Eng. Riad Assaf رياض أصاف
Email	riadassaf@hotmail.com
Office Hours	Wednesday 13:00~15:00

II- Course Description

The course is a continuation of Stat 1; it provides the student with more scientific methods for collecting, organizing, summarizing, presenting, and analyzing data as well as drawing valid conclusions and making reasonable decisions based on such analysis.

III- Course Objectives

This course aims to provide students with further concepts and terminology of probability and statistics sciences in view to use in business analytics.

- ❖ Analysis of Variance
- ❖ Linear regression
- ❖ Multiple Regression Analysis
- ❖ Nonparametric Methods

In order to achieve the objectives of the course, the following requirements must be met by the student:

- Scientific activities
- Academic regulations
- Academic work and perseverance
- 70% attendance and participation



IV- Course Outline and Calendar

Learning Objective	Week(s)	Learning Content	Pedagogical Strategy& Tools
Chapter 14	2	Multiple Regression Analysis	Lecture course, Applications
Chapter 15	2	Index Numbers	Lecture course, Applications
Chapter 16	2	Time series and Forecasting	Lecture course, Applications
Midterm			
Chapter 17	2	Goodness-of-Fit Tests	Lecture course, Applications
Chapter 18	2	Analysis of Ranked Data	Lecture course, Applications
Chapter 19	2	Statistical Process Control	Lecture course, Applications
Final Exam			

P.S.: The course outline and calendar above may be modified during the semester.

V- Teaching approach & methods

To achieve the objectives of the course, the following methodological approaches will be used:

- ☐ Lecture course
- ☐ Applications using MS-Excel and/or SPSS
- ☐ Personal work
- ☐ Discussion
- ☐ Questioning
- ☐ Guided reading (book)
- ☐ Texts collection
- ☐ Case study
- ☐ Active participation

VI- Assessment Methods

The success of the student in this course is based on:

- 1- His/her active participation in class.
- 2- His/her scientific contribution through assignments / research done outside the classroom.
- 3- His/her reading notes, research reports and practical applications as requested by course instructor.

The assessment of the student is carried out according to the following grid:



Assessment Type	Final Grade Weighting (%)	Dates/Deadlines
Participation (projects, research paper, oral presentation, etc.)	10%	Week#10
Midterm Exam (or assignments)	30%	Week#06
Final exam	60%	Set by administration
Total	100%	Set by administration

VII- Specific Course Requirements

1- Regulations concerning deadlines for written and applied work submissions

The teacher has the right to:

- Refuse to receive written applied work outside the deadlines.
- Give the student additional time after omitting up to 25% of the mark awarded to the concerned activity.

2- Academic measures in case of plagiarism

The student shall be liable to the following penalties in case of any attempt of illicit scientific citation:

- Cancellation of the student's contribution, activity or scientific article and reduction of the final mark.
- If the same offense is reported in other courses, cancellation of the final exam and failure in the relevant course(s).

VIII- Reference Book

Lind D., Marchal W., Wathen S., *Statistical Techniques in Business & Economics*. McGraw-Hill / Irwin, 2012. ISBN: 978-0-07-340180-5.

IX- Bibliography& Additional Sources

Deborah Rumsey, *Statistics II For Dummies*. Wiley Publishing, Inc., 2009. ISBN: 978-0-470-46646-9.

Anderson Alan, Semmelroth David, *Statistics For Big Data For Dummies*. John Wiley & Sons Publishing, Inc., 2015. ISBN: 978-1-118-94003-7 (ePDF).

Heumann C., Schomaker M., Shalabh. 2016. *Introduction to Statistics and Data Analysis With Exercises, Solutions and Applications in R*. Springer, 2016. ISBN: 978-3-319-46162-5 (ebk).