Department of: Statistics

College of: Administration and Economics

University of: Salahaddin

Subject: Statgraphics

Course Book – *3*

Lecturer's name: Dr.Rizgar Maghded Ahmed

Academic Year: 4

2021-2022

Course Book

1. Course name	
2. Lecturer in charge	
3. Department/ College	Statistics / Administration and Economics
4. Contact	
5. Time (in hours) per week	Theory: Practical:
6. Office hours	
7. Course code	
8. Teacher's academic profile	
9. Keywords	Plots, Analyse, Elementary of Statistics, central tendency, correlation, regression, time series, Quality control, Analysis of Variance.

10. Course overview:

he courses aims at teaching students to learn not only the language itself but the way to program. So, the student should be able to know how to achieve a specified goal in programing independently, which includes designing the algorithms, searching for commands, and debugging. Importantly, they also need to have the knowledge about the basic methodology in programing and statistics, so that they can interpret their output properly.

11. Course objective:

is a statistics and data analysis program for businesses, governments, research institutes, and academic organizations. In these tutorials. From importing spreadsheets to creating regression models, to exporting charts, this course covers all the basics, with an emphasis on clarity, interpretation, communicability, and application.

12. Student's obligation

A student has an obligation to exhibit honesty and to respect the ethical standards of the profession in carrying out his or her academic assignments. Without limiting the application of this principle, a student may be found to have violated this obligation if he or she.

13. Forms of teaching

Many computer science departments around the world are wondering today how best to teach introductory programming. This has always been a difficult task, but new challenges have been added to the traditional ones:

• There is a strong pressure from many sources to emphasize directly operational skills over deeper, long-term concepts.

• Pressure also come from student families - more influential nowadays than in the past - who focus on the specific skills required in the job ads of the moment, and don't necessarily realize that four years later the acronyms listed in these ads might be different.

• Many academics who push fashionable technologies by invoking the demands of industry misunderstand industry's real needs: real industry recruiters — at least the good ones — know to look for problem-solving skills rather than narrow knowledge.

• Students come with a wide variety of backgrounds. Some have barely touched a computer; others may have programmed extensively before. It's tempting to assume programming experience, but this is unfair to students from the first category, who will then almost automatically fail, even though some may have developed other skills - such as mathematics- and have the potential to become good computer scientists.

14. Assessment scheme

Grading :

- 25% $E_{xam\cdot Theory}$
- 25% $E_{xam\cdot Practice}$

15. Student learning outcome:

Student learning outcomes that are phrased. the student will: know, learn, appreciate, understand, etc..are not appropriate for this purpose.

They may be critically important overarching goals, but are not specific enough to lend themselves to measurability for the purposes of course assessment.

Course objectives provide a description of what you are trying to accomplish.

Your program should have explicit goals and learning objectives, and course objectives should be aligned with them. Students cannot be expected to master learning objectives unless they are given the opportunity to develop them in required coursework.

16. Course Reading List and References:

1. STATGRAPHICS® Centurion XV, User Manual, ©2005 by StatPoint, Inc., USA.
2. www.statgraphics.com
3. www.aitrs.org
4. www.arabstat.com

17. The Topics of Statgraphics-Programming:

Lecturer's name

Six hours a week
Practical Hall

Topics	Date
Chapter One *Introduction to Statgraphics-Programming*	
1-1 Introduction 1-2 Starting - program 1-3 Windows of - program 1-4 Define - files 1-5 Define - icons	First week
Chapter Two	
2-1 Define Variable	Second week
2-2 *File*: 2-2-1 Open: 1. Open Data File 2. Open stat Folio 3. Open stat Gallery 4. Open Stat Reporter	Second week
2-2-2 Close file*:* 1. Close Data File 2. Close stat Folio 3. Close stat Gallery 4. Close Stat Reporter	Third week
2-2-3 Save file: 1. Save Data File 2. Save stat Folio 3. Save stat Gallery 4. Save Stat Reporter	Third week

2-2-4 Save As file*:* 1. Save Data File As 2. Save stat Folio As 3. Save stat Gallery As 4. Save Stat Reporter As	Fourth week
2-2 *Edit:* 1. Undo 2. Cut 3. Copy 4. Paste 5. Copy Analysis 6. Insert 7. Delete 8. Modify column 9. Generate Data 10. Sort Data	Fourth week
2-3 *View:* 1. Tool Bar 2. Status Bar 3. Stat advisor	week
2-4 *Tools:* ➢ Probability Distributions	Fifth week
2-5 *Measure*: 2-6-1 Scatter Plots: 1. Scatter Plots 2. X-Plot 3. X-Y Plot 4. X-Y -Z plot 5. Multiple X-Y plot 6. Matrix plot	Sixth week Seventh week
2-6-2 Exploratory plots: 1. Box – and – Whisker plot 2. Multiple Box – and – Whisker plot 3. Dot-Diagrams 4. Frequency Histogram 5. Normal Probability plot 6. Bar chart 7. Multiple Bar chart 8. Piechart	Seventh week Eighth week

2-7 *Analyze:* 1. One Variable Analysis 2. Multiple Variable Analysis 3. Tabulation 4. Crosstabulation 5. Distribution fitting 6. Two Samples Comparisons 7. Multiple Samples Comparisons 8. Hypothesis tests 9. Reliability Analysis	Ninth week Tenth week
2-8 *Improve:* 1. Regression Analysis 2. Simple Regression 3. Multiple Regression 4. Analysis of variance	Eleventh week Twelfth week
2-8-1 Multiple Samples: 1. Multiple Samples Comparison 2. Comparison of Proportions 2-8-2 Analysis of Variance 1. One way ANOVA 2. Multifactor - way ANOVA 3. Variance Components	Thirteenth week Fourteenth week
2-8-3 Midterm Exam	fifteenth week

18. Practical Topics (If there is any)	
The same thing earlier	Practical Hall
19. Examinations:	
20. Extra notes:	
21. Peer review	