

Department of Statistics & Operation Research - King Saud University
Syllabus STAT 328 – Packages, Credit hours 3 (2+1+0).
2nd Semester 2025-2026

Instructor: Kholoud Basalim

Office: Building 5 - 66 third floor

email: kbasalim@ksu.edu.sa

Office hours: Sunday: 11:00-1:00 PM - Tuesday: 11:00 -1:00 PM - Thursday: 9:00-10:00 AM.

Using Excel (4 weeks), R (5 weeks) and Python (5 weeks)

Part I: Excel

Week 1: Mathematical & Statistical and logical functions and computation probability distributions

Week 2: Descriptive statistics and testing hypothesis

Week 3: One and two-way anova

Week 4: Correlation and regression

Part II: R program

Week 5: Mathematical & Statistical and logical functions and computation probability distributions and creating some programs with R (loops for, while, sums, integrals)

Week 6: Descriptive statistics and testing hypothesis

Week 7: One and two-way anova

Week 8: Correlation and regression

Week 9: Application for the above topics in same data in R

Part III: Python program

Week 10: Mathematical & Statistical and logical functions and computation probability distributions and creating some programs with R (loops for, while, sums, integrals)

Week 11: Descriptive statistics and testing hypothesis

Week 12: One and two-way anova

Week 13: Correlation and regression

Week 14: Application for the above topics in same data in R

Assignments and Exams:

- First Midterm exam (Excel) 20%
- Second Midterm exam (R) 20%
- Project 1 (R), Project 2 (Python) 10% and 10%
- Final exam (Excel, R and Python) 40%

Attendance: Students missing more than 25% of the total class hours won't be allowed to write the final exam.