COMPUTER AIDED STATISTICAL ANALYSIS Course Title: COMPUTER AIDED STATISTICAL ANALYSIS 1 Course Code: EKO2203 2 Type of Course: Compulsory 3 Level of Course: 4 First Cycle Year of Study: 2 5 3 Semester: 6 ECTS Credits Allocated: 5.00 7 Theoretical (hour/week): 3.00 8 9 Practice (hour/week): 0.00 10 Laboratory (hour/week): 0 None 11 Prerequisites: Turkish 12 Language: Mode of Delivery: Face to face 13 14 Course Coordinator: Prof. Dr. ERKAN IŞIGIÇOK 15 Course Lecturers: Contact information of the Course E-posta : eris@uludag.edu.tr 16 Coordinator: Telefon: 0 224 29 41101 Adres: Bursa Uludağ Üniversitesi, İktisadi ve İdari Bilimler Fakültesi, Ekonometri Bölümü, 16059, Görükle/Bursa. Website: 17 18 Objective of the Course: To apply the subjects learned in Descriptive Statistics and Inferential Statistics with R program and to interpret the findings. Contribution of the Course to Statistical methods and techniques of education is to give the 19 Professional Development: students can apply to their fields. 20 Learning Outcomes: 1 To be able to install R Project and install R packages 2 To be able to use basic commands and operate in R 3 To be able to use statistical functions 4 To be able to apply descriptive statistics 5 To be able to apply inferential statistics 6 To be able to interpret the findings 7 8 9 10 Course Content: 21 **Course Content:** Practice Week Theoretical Installation of R Project and Packages 1 Data Entry and Arithmetical Process in R 2 Project Vectors, Matrix, List and Tables 3 Data preprocessing, Data Import 4 5 Data Derivation in R

| 6 | Usage | Usage of function in R | | | | | | | | | | | | | | | | | | |
|--|--|---|------------------|-------------------|------------------|-----------------|---------|---------|-----|---|----------|---------|----------|------------------------------------|-------|------|------|--|--|--|
| 7 | Data \ R | Data Vizualization, Graphs and Aplications in R | | | | | | | | | | | | | | | | | | |
| 8 | Avera and A | ge, ppli | Dispe icatior | ersion ns | Meas | sures, F | Probab | oility | | | | | | | | | | | | |
| 9 | Proba | bilit | ty Dist | tributio | ons ar | nd Appl | licatio | ns in F | 2 | | | | | | | | | | | |
| 10 | Confic | len | ce Int | erval a | and A | pplicati | ons ir | n R | | | | | | | | | | | | |
| 11 | Hypot | hes | sis Te | sts an | d App | licatior | ns in R | 2 | Τ | | | | | | | | | | | |
| 12 | Basic Analiy | ve sis | Multip and A | ole Re Applica | gressi ations | ion anc in R | d Corr | elatior | 1 | | | | | | | | | | | |
| 13 | Trend in R | An | alysis | and E | Extrap | olation | Appli | cation | IS | | | | | | | | | | | |
| 14 | Statist | tica | l Pros | es Co | ontrol / | Applica | tions | in R | | | | | | | | | | | | |
| 22 | Textbe Mater | ook ials | s, Re | ferenc | es an | d/or Ot | ther | | Pro | Prof. Dr. Erkan Işığıçok, Dr. Öğr. Üyesi Emrah Akdamar, R | | | | | | | | | | |
| 23 | 23 Assesment | | | | | | | | | | | , | <u> </u> | , - | | | | | | |
| TERM L | EARNI | NG | ACTI | VITIES | ; | | N | IUMBE | WE | WEIGHT | | | | | | | | | | |
| N 41 14 | | | | | | | R | 1 | 10 | | | | | | | | | | | |
| Midtern | n Exan | <u>า</u> | | | | | 1 | | 40 | 40.00 | | | | | | | | | | |
| Quiz 0 | | | | | | | | | | 0.00 | | | | | | | | | | |
| Home work-project 0 | | | | | | | | | 0.0 | 0.00 | | | | | | | | | | |
| Final E | xam | | | | | | 1 | | 60 | 60.00 | | | | | | | | | | |
| Activites | | | | | | | | | 1 | Numb | er | | Dura | Duration (hour) Total V Load (I | | | | | | |
| Congriguinian of Final Exam to Success Grade | | | | | | | | | | 1 6 0 | | | 3.00 | | 42.00 | | | | | |
| Practicals/Labs | | | | | | | | | |) | | | 0.00 | | | 0.00 | | | | |
| Selasturement analysiatuation Techniques Used in the | | | | | | | | | | A Itiple o | choice | test au | and w | written guestions | | | | | | |
| Homeworks | | | | | | | | | |) | | | 0.00 | | | 0.00 | | | | |
| Pratect ECTS / WORK LOAD TABLE | | | | | | | | | | 0 | | | | 0.00 | | | 0.00 | | | |
| Field Studies | | | | | | | | | |) | | | 0.00 | | | 0.00 | | | | |
| Midterm exams | | | | | | | | | | 1 | | | | | 40.00 | | | | | |
| Others | | | | | | | | | | 0 | | | | | 0.00 | | | | | |
| Final Exams | | | | | | | | | | l | | | 60.00 | | 60.00 | | | | | |
| Total Work Load | | | | | | | | | | 196.00 | | | | | | | | | | |
| Total work load/ 30 hr | | | | | | | | | | 5.20 | | | | | | | | | | |
| ECTS Credit of the Course | | | | | | | | | | 5.00 | | | | | | | | | | |
| 25 | 5 CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS | | | | | | | | | | | | | | | | | | | |
| | P | ຊ1 | PQ2 | PQ3 | PQ4 | PQ5 | PQ6 | PQ7 | PQ8 | PQ9 | PQ1 0 | PQ11 | PQ12 | PQ1 3 | PQ14 | PQ15 | PQ16 | | | |
| ÖK1 | 2 | | 3 | 5 | 2 | 3 | 4 | 4 | 5 | 3 | 3 | 3 | 4 | 0 | 0 | 0 | 0 | | | |
| ÖK2 | 3 | | 3 | 2 | 3 | 4 | 3 | 3 | 2 | 3 | 2 | 4 | 3 | 0 | 0 | 0 | 0 | | | |
| ÖK3 | 1 | | 4 | 3 | 4 | 2 | 3 | 3 | 3 | 5 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | | | |
| ÖK4 | 3 | | 3 | 4 | 4 | 4 | 3 | 4 | 1 | 3 | 3 | 2 | 2 | 0 | 0 | 0 | 0 | | | |

| ÖK5 | 3 | 2 | 2 | 3 | 3 | 4 | 3 | 4 | 1 | 3 | 2 | 4 | 0 | 0 | 0 | 0 |
|--|--------------------|---|---|-------|---|---|----------|---|---|--------|---|---|-------------|---|---|---|
| ÖK6 | 3 | 4 | 3 | 2 | 3 | 3 | 4 | 2 | 4 | 3 | 4 | 3 | 0 | 0 | 0 | 0 |
| LO: Learning Objectives PQ: Program Qualifications | | | | | | | | | | | | | | | | |
| Contrib ution Level: | ib 1 very low : | | | 2 low | | | 3 Medium | | | 4 High | | | 5 Very High | | | |