| | STATISTICS FOR | ENVI | RONMENTAL ENGINEERS | | | | | | |
|-----|---|---|---|--|--|--|--|--|--|
| 1 | Course Title: | STATIST | FICS FOR ENVIRONMENTAL ENGINEERS | | | | | | |
| 2 | Course Code: | CEV530 | 2 | | | | | | |
| 3 | Type of Course: | Compuls | sory | | | | | | |
| 4 | Level of Course: | Second | Cycle | | | | | | |
| 5 | Year of Study: | 1 | | | | | | | |
| 6 | Semester: | 2 | | | | | | | |
| 7 | ECTS Credits Allocated: | 6.00 | | | | | | | |
| 8 | Theoretical (hour/week): | 3.00 | | | | | | | |
| 9 | Practice (hour/week): | 0.00 | | | | | | | |
| 10 | Laboratory (hour/week): | 0 | | | | | | | |
| 11 | Prerequisites: | None | | | | | | | |
| 12 | Language: | Turkish | | | | | | | |
| 13 | Mode of Delivery: | Face to f | ace | | | | | | |
| 14 | Course Coordinator: | Prof. Dr. | ERKAN IŞIGIÇOK | | | | | | |
| 15 | Course Lecturers: | | | | | | | | |
| 16 | Contact information of the Course Coordinator: | E-mail: eris@uludag.edu.tr Telefon: 224 29 41101 Adres: Bursa Uludağ Üniversitesi İktisadi ve İdari Bilimler Fakültesi,Ekonometri Bölümü,Görükle,Bursa | | | | | | | |
| 17 | Website: | | | | | | | | |
| 18 | Objective of the Course: | Teaching the statistical methods for using in engineering practices. | | | | | | | |
| 19 | Contribution of the Course to Professional Development: | The course provides knowledge to analyze and interpret the students descriptive and inferential statistics related to the engineering practices. | | | | | | | |
| 20 | Learning Outcomes: | | | | | | | | |
| | | 1 | After the completion of the course, the student will be able to use statistical methods for organizing data obtained from engineering applications. | | | | | | |
| | | 2 | After the completion of the course, the student will evaluate the data using statistical methods and reach scientific conclusions. | | | | | | |
| | | 3 | After the completion of the course, the student will be able to use statistical methods for designing scientific studies. | | | | | | |
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| 21 | Course Content: | | Outline Control | | | | | | |
| 10/ | The area Const. | Сс | purse Content: | | | | | | |
| | Theoretical | _ | Practice | | | | | | |
| 1 | Definition and importance of statistic Collection and organization of data. Classifying and grouping of data. | :S. | | | | | | | |

| 2 | Grap | hica | l meth | nods. | The m | nean. D | istribu | utions | | | | | | | | | |
|--|--|--|--------|---------|-------|---------------|---------|---------|---------------------|----------|----------|---------|-----------------|--------------|-----------------|---------------------------|------|
| | Graphical methods. The mean. Distributions. Variation. Standard deviation. | | | | | | | | | | | | | | | | |
| 3 | | Tests of hypotheses. Large-sample tests. | | | | | | | | | | | | | | | |
| 4 | Tests of hypotheses. Small-sample tests. Confidence interval. | | | | | | | | | | | | | | | | |
| 5 | Corre | Correlation. | | | | | | | | | | | | | | | |
| 6 | Correlation. | | | | | | | | | | | | | | | | |
| 7 | Regression. Coefficient of determination. The method of least squares. | | | | | | | е | | | | | | | | | |
| 8 | Regression. Checking model adequacy. | | | | | | | | | | | | | | | | |
| 9 | Analysis of variance. | | | | | | | | | | | | | | | | |
| 10 | Analysis of variance. | | | | | | | | | | | | | | | | |
| 11 | Analysis of variance. | | | | | | | | | | | | | | | | |
| 12 | Basic | Basic principles of experimental design. | | | | | | | | | | | | | | | |
| 13 | Methodology for experimental design. | | | | | | | | | | | | | | | | |
| 14 | Experimental design. Randomized complete block design. Factorial design. | | | | | | | | | | | | | | | | |
| 22 | Textbooks, References and/or Other Materials: Freund J.E. and Simon G.A. (1992) Modern Elementary Statistics, Prentice-Hall Inc., Englewood Cliffs, N.J., ISBN:0-13-587825-X. | | | | | | | | | | tary | | | | | | |
| 23 | Asse | sme | ent | | | | | | | | | | | | | | |
| Activit | ctivites | | | | | | | | Number | | | Dura | Duration (hour) | | | Total Work Load (hour) | |
| Дре оге | etical | | | | | | 0 | | 0.0 | 30 | | | 3.00 | | | 42.00 | |
| Practic | icals/Labs | | | | | | | (| 0 | | | 0.00 | 0.00 | | | 0.00 | |
| PALAPE | Marketichand preperation 1 | | | | | | | 60 | 601 .0 0 | | | 4.00 | | | | 56.00 | |
| Homev | neworks | | | | | | | (| 0 | | | 0.00 | | | | 0.00 | |
| | Boilens to Control of Term (Year) Learning Activities to | | | | | | 40 | 40.00 | | | 0.00 | | | | 0.00 | | |
| | Studies | | | | | | | | 0 | | | 0.00 | | | | 0.00 | |
| | of the flow thousands Final Exam to Success Grade 6 1200 | | | | | | | | | | 20.00 | | | | 40.00 | | |
| Others | | | | | | | | | |) | | | 0.00 | | | 0.00 | |
| | | | d Eva | luation | n Tec | <u>hnique</u> | s Use | d in th | e mi | ltiple (| choice | test qu | estions | and w | <u>ritten a</u> | 40.00 Jestions | |
| | Work Load 218.00 | | | | | | | | | | | | | | | | |
| | w匠QT多//3WQRK LOAD TABLE Credit of the Course | | | | | | | | | | | | | 5.93 6.00 | | | |
| | | 01 11 | | | | | | | | | 01174 | 20115 | | | | | |
| 25 | 25 CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS | | | | | | | | | | | | | | | | |
| | F | Q1 | PQ2 | PQ3 | PQ4 | PQ5 | PQ6 | PQ7 | PQ8 | PQ9 | PQ1 0 | PQ11 | PQ12 | PQ1 | PQ14 | PQ15 | PQ16 |
| ÖK1 | 1 | | 5 | 3 | 5 | 3 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 3 | 3 | 0 | 0 |
| ÖK2 | 3 | , | 1 | 2 | 5 | 2 | 3 | 3 | 1 | 2 | 2 | 3 | 3 | 3 | 2 | 0 | 0 |
| ÖK3 | 3 | | 2 | 1 | 5 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 2 | 3 | 0 | 0 |
| | | | ı | O· I | earr | nina C |)hier | tive | s F | O D | roars | ım Qıı | alifica | ntions | <u> </u> | | I |
| LO: Learning Objectives PQ: Program Qualifications | | | | | | | | | | | | | | | | | |

| Contrib | 1 very low | 2 low | 3 Medium | 4 High | 5 Very High |
|---------|------------|-------|----------|--------|-------------|
| ution | | | | | |
| Level: | | | | | |