

OSTIM TECHNICAL UNIVERSITY FACULTY OF ECONOMICS AND ADMINISTRATIVE SCIENCES

COURSE SYLLABUS FORM 2020-2021 SPRING

| ITF 206 Business Statistics | | | | | | | |
|-----------------------------|----------------|--------|-------|-------------|------------|--------|------|
| Course Name | Course Code | Period | Hours | Application | Laboratory | Credit | ECTS |
| BUSINESS STATISTICS | ITF 206 | 4 | 3 | 1 | 0 | 3 | 5 |

| Language of Instruction | English |
|---|---|
| Course Status | Compulsory |
| Course Level | Bachelor |
| Learning and Teaching Techniques of the | Theoretical teaching, Group Work, Questions and |
| Course | Answers, Practical Problem Solving |

Course Objective

The aim of this course is to understand the importance of basic concepts of business statistics in the business world, to understand how the business world uses statistics and data analyses, and to recognize the usage areas of data management in businesses.

Learning Outcomes

Upon successful completion of this course, a student will be able to:

- understand the basic concepts of business statistics.
- explore the usage areas of statistics and data in business life.
- have knowledge on subjects such as sampling theory and distributions; confidence intervals and hypothesis testing; regression.
- understand how statistics is used in order to solve a business problem.

Course Outline

The main aim of the course theoretical background of the area with daily life examples. Learning basic business statistics and their application in business environment will be the main goal. The course covers various topics like descriptive statistics, probability, discrete and continuous random variables, estimation, hypothesis testing, regression analysis. The course emphasizes statistics to solve management problems.

Weekly Topics and Related Preparation Studies

| Weeks | Topics | Preparation Studies | | |
|-------|------------|----------------------------------|--|--|
| 1 | 25.02.2021 | Introduction and Describing Data | | |
| 2 | 04.03.2021 | Probability | | |



| 3 | 11.03.2021 | Discrete Random Variables and Probability Distributions |
|----|----------------------|---|
| 4 | 18.03.2021 | Continuous Random Variables and Probability Distributions |
| 5 | 25.03.2021 | Sampling and Sampling Distributions |
| 6 | 01.04.2021 | Estimation |
| 7 | 08.04.2021 | Estimation II |
| 8 | Midterm (15.04.2021) | |
| 9 | 22.04.2021 | Hypothesis Testing |
| 10 | 29.04.2021 | Simple Regression |
| 11 | 06.05.2021 | Multiple Regression |
| 12 | 13.05.2021 | Multiple Regression II |
| 13 | 20.05.2021 | Goodness-of-Fit Tests |
| 14 | 27.05.2021 | Analysis of Variance |
| 15 | 03.06.2021 | Analysis of Variance II |
| 16 | Final Exam | |

Textbook(s)/References/Materials:

 Basic Statistics for Business and Economics. Douglas Lind, William Marchal, Samuel Wathen. Mc Graw Hill. 9th Edition. 2018.

| Assessment | | | | |
|-------------------------------------|--------|-------------------------|--|--|
| Studies | Number | Contribution margin (%) | | |
| Active Participation | 14 | 10 | | |
| Lab | | | | |
| Application | | | | |
| Field Study | | | | |
| Course-Specific Internship (if any) | | | | |
| Quizzes / Studio / Critical | | | | |
| Homework | 5 | 30 | | |
| Presentation | | | | |
| Projects | | | | |
| Report | | | | |
| Seminar | | | | |
| Midterm Exam | 1 | 25 | | |



| Final Exam | 1 | 35 |
|--|-------|-----|
| | Total | 100 |
| Success Grade Contribution of Semester Studies | | 40 |
| Success Grade Contribution of End of Term | | 60 |
| | Total | 100 |

| Relationship Between Course Learning Outcomes and Program Competencies | | | | | | |
|--|--|------------------------------|--|---|---|---|
| Nu | Learning Outcomes | Contribution Level 1 2 3 4 5 | | | | |
| 1 | Present basic statistics | | | 3 | 4 | X |
| 2 | To analyze practical implications of theoretical statistical knowledge acquired in class | | | | х | |
| 3 | Gain experience to use statistics in order to solve management problems. | | | | Х | |
| 4 | To present obtained data in a formal presentation | | | | | Х |

| ECTS / Workload Table | | | | |
|--|--------|---------------------|-------------------|--|
| Activities | Number | Duration (Hours) | Total Workload | |
| Course hours (Including the exam week: 16 x total course | 16 | 3 | 48 | |
| hours) | | | | |
| Laboratory | | | | |
| Application | | | | |
| Course-Specific Internship | | | | |
| Field Study | | | | |
| Study Time Out of Class | 16 | 2 | 32 | |
| Presentation / Seminar Preparation | | | | |
| Projects | | | | |
| Reports | | | | |
| Homework | | | | |
| Quizzes / Studio Review | | | | |
| Preparation Time for Midterm Exams / Midterm Jury | 1 | 6 | 6 | |
| Preparation Period for the Final Exam / General Jury | 1 | 6 | 6 | |
| Total Workload | (92/25 | = 3,68) | 92 | |