

**OSTIM TECHNICAL UNIVERSITY**  
**FACULTY OF ECONOMICS AND ADMINISTRATIVE SCIENCES**  
**INTERNATIONAL TRADE AND FINANCE DEPARTMENT**  
**COURSE SYLLABUS FORM**  
**2022-2023 SPRING**

<b>BUS 203 Business Statistics</b>							
<b>Course Name</b>	<b>Course Code</b>	<b>Period</b>	<b>Hours</b>	<b>Application</b>	<b>Laboratory</b>	<b>Credit</b>	<b>ECTS</b>
Business Statistics	BUS203	4	3	1	0	3	5

<b>Language of Instruction</b>	English
<b>Course Status</b>	Compulsory
<b>Course Level</b>	Bachelor
<b>Learning and Teaching Techniques of the Course</b>	Lecture, Theoretical teaching, Question-Answer, Practical Problem Solving
<b>Class Time/Classroom</b>	
<b>Instructor</b>	
<b>Office</b>	
<b>E-mail</b>	
<b>Office Hours</b>	
<b>Teaching Assistants</b>	-

<b>Course Objective</b>
The aim of this course is to understand the importance of basic concepts of business statistics. In this course, students will have better understanding of basic statistical techniques and data analysis.

### Learning Outcomes

The students who become successful in this course will be able;

1. To understand the basic concepts of business statistics.
2. To explore the usage areas of statistics and data in business life.
3. To understand how statistics is used in order to compare and solve the problems in different areas (especially in business).
4. To have knowledge on subjects such as descriptive relationships for the data, probability theory, discrete and continuous variables and their distributions.
5. To have knowledge on subjects such as sampling theory and distributions, confidence intervals and hypothesis testing, regression.

### Course Outline

Descriptive relationships and statistics, describing the data, introduction to probability theory, discrete and continuous random variables, the normal distribution, central limit theorem, properties of point estimators, confidence interval estimation for one population and two populations, hypothesis testing for single population and two populations, simple regression, introduction to multiple regression and analysis of variance.

### Weekly Topics and Related Preparation Studies

Weeks	Topics	Preparation Studies
1	Introduction to Statistics	Introduction to Statistics and Some Basic Terms
2	Describing Data: Graphical (Newbold, Carlson & Thorne Chap.1)	Graphs to Describe Categorical Variables Graphs to Describe Time-Series Data Graphs to Describe Numerical Variables
3	Describing Data: Numerical (Newbold, Carlson & Thorne Chap.2)	Measures of Central Tendency and Location Measures of Variability Weighted Mean and Measures of Grouped Data
4	Probability-I (Newbold, Carlson & Thorne Chap.3)	Random Experiment, Outcomes, and Events Probability and Its Postulates Probability Rules
5	Probability-II (Newbold, Carlson & Thorne Chap.3)	Bivariate Probabilities Bayes' Theorem

6	Discrete Random Variables and Probability Distributions (Newbold, Carlson & Thorne Chap.4)	Random Variables Probability Distributions for Discrete Random Variables Some distributions
7	Continuous Random Variables and Probability Distributions (Newbold, Carlson & Thorne Chap.5)	Continuous Random Variables The Normal Distribution Jointly Distributed Continuous Random Variables
<b>8</b>	<b>MIDTERM EXAM</b>	
9	Sampling and Sampling Distributions (Newbold, Carlson & Thorne Chap.6)	Sampling from a Population Central Limit Theorem
10	Estimation: Single Population (Newbold, Carlson & Thorne Chap.7)	Properties of Point Estimators Confidence Interval Estimations for Different Data Types
11	Estimation: Single Population / Two Populations (Newbold, Carlson & Thorne Chap.7-8)	Confidence Interval Estimations for Different Data Types
12	Hypothesis Testing: Single Population (Newbold, Carlson & Thorne Chap.9)	Concepts of Hypothesis Testing Hypothesis Testing for Different Data Types
13	Hypothesis Testing: Single Population / Two Populations (Newbold, Carlson & Thorne Chap.9-10)	Hypothesis Testing for Different Data Types
14	Simple Regression (Newbold, Carlson & Thorne Chap.11)	Linear Regression Model Least Squares Coefficient Estimators
15	Introduction to Multiple Regression / ANOVA (Newbold, Carlson & Thorne Chap.12-15)	The Multiple Regression Model Comparison of Several Population Means One-Way Analysis of Variance
<b>16</b>	<b>FINAL EXAM</b>	

**Textbook(s)/References/Materials:**

**Textbook:**

- Newbold, P., Carlson, W.L., and Thorne, B. M., Statistics for Business and Economics, 8th Edition, Pearson, 2013.

<b>Assessment</b>		
<b>Studies</b>	<b>Number</b>	<b>Contribution margin (%)</b>
Attendance		
Lab		
Class participation and performance		
Field Study		
Course-Specific Internship (if any)		
Quizzes / Studio / Critical		
Homework		
Presentation		
Projects		
Report		
Seminar		
<b>Midterm Exam/Midterm Jury</b>	<b>1</b>	<b>40</b>
<b>General Exam / Final Jury</b>	<b>1</b>	<b>60</b>
<b>Total</b>		<b>100</b>
<b>Success Grade Contribution of Semester Studies</b>		<b>40</b>
<b>Success Grade Contribution of End of Term</b>		<b>60</b>
<b>Total</b>		<b>100</b>

<b>ECTS / Workload Table</b>			
<b>Activities</b>	<b>Number</b>	<b>Duration (Hours)</b>	<b>Total Workload</b>
<b>Course hours (Including the exam week): 16 x total course hours)</b>	16	3	48
Laboratory			
Application			
Course-Specific Internship (if any)			
Field Study			
<b>Study Time Out of Class</b>	24	1	24
Presentation / Seminar Preparation			
Projects			
Reports			
Homework			
Quizzes / Studio Review			
Preparation Time for Midterm Exams / Midterm Jury	1	24	24
Preparation Period for the Final Exam / General Jury	1	30	30
<b>Total Workload</b>		<b>(126/25 = 5.04)</b>	<b>126</b>
<b>ECTS</b>		<b>5</b>	

Course' Contribution Level to Learning Outcomes						
Nu	Learning Outcomes	Contribution Level				
		1	2	3	4	5
L01	To understand the basic concepts of business statistics.					X
L02	To explore the usage areas of statistics and data in business life.					X
L03	To understand how statistics is used in order to compare and solve the problems in different areas (especially in business).					X
L04	To have knowledge on subjects such as descriptive relationships for the data, probability theory, discrete and continuous variables and their distributions.					X
L05	To have knowledge on subjects such as sampling theory and distributions, confidence intervals and hypothesis testing, regression.					X

Relationship Between Course Learning Outcomes and Program Competencies (International Trade and Finance)							
Nu	Program Competencies	Learning Outcomes					Total Effect (1-5)
		L01	L02	L03	L04	L05	
1	Have advanced theoretical and up-to-date knowledge in discipline-specific areas such as international trade, finance, logistics, and general business and international business such as economics, marketing, management, accounting.	X	X	X			3
2	Evaluate, follow, absorb and transfer new information in the field of international trade.						-
3	Conduct market research, carry out projects and develop strategies for a business to open up to international markets.	X	X	X			3
4	Use knowledge of national and international trade law and legislation in the management of international commercial operation processes.						-
5	Work independently and within an organization, using the knowledge and skills acquired in the field and adopting continuous learning.	X	X	X	X	X	5
6	Have the ability to apply her theoretical knowledge in real life, with the experience she will gain through practice in departments such as marketing, accounting, foreign trade, finance, logistics.	X	X	X	X	X	5
7	Have the theoretical knowledge to carry out export, import, customs clearance, logistics, taxation and other international trade activities		X		X		2

	within the scope of global and regional commercial and economic organizations.						
<b>8</b>	Can develop a business idea, commercialize the business idea, and design and manage their own venture using their entrepreneurial knowledge.	X	X	X	X	X	5
<b>9</b>	Using strategic, critical, innovative and analytical thinking skills, actively take part in the decision-making processes of the enterprise in the field of foreign trade and finance.	X	X	X	X	X	5
<b>10</b>	Act in accordance with ethical values, respectful to the environment, social and universal values in all activities it will carry out in its field.						-
<b>11</b>	Have the skills to follow up-to-date information at national and international level, to gather information about field, and to communicate with international institutions / organizations using her/him knowledge of English and a second foreign language of her choice.						-
<b>12</b>	Gain professional competencies to take charge in national and international businesses, public and private sector organizations						-
<b>13</b>	Can evaluate the problems and conflicts encountered in all areas related to international trade from different perspectives with a holistic approach and produce value-based solutions.			X	X		2
<b>Total Effect</b>							<b>30</b>

## Policies and Procedures

**Web page:** <https://www.ostimteknik.edu.tr/uluslararasi-ticaret-ve-finansman-bolumu-209/25>

**Exams:** The exams aim at assessing various dimensions of learning: knowledge of concepts and theories and the ability to apply this knowledge to real world phenomenon, through analyzing the situation, distinguishing problems and by suggesting solutions.

The written exams can be of two types, i.e. open-ended questions, which can also be in the form of problems or multiple-choice questions.

Exams are composed of a final exam comprising 60% of the student's grade and a mid-term exam, with less weight.

The Department of Economics does not tolerate any act of academic dishonesty. Examinations are individual and must be completed without any outside assistance. Students who attempt to cheat during exams will receive a failing grade from that exam. The case could also be carried to the Dean's Office for additional disciplinary action.

**Missed exams:** Any student missing an exam needs to bring an official medical report to be able to take a make-up exam.

**Attendance:** Attendance requirements are announced at the beginning of the term. Student are usually expected to attend at least 70% of the classes during each term.

**Objections:** If the student observes a material error in his/her grade, he/she has the right to place an objection to the Faculty or the Department. The claim is examined and the student is notified about its outcome.