

# **ÇANKAYA UNIVERSITY Faculty of Economics and Administrative Sciences Course Definition Form**

# Part I. Basic Course Information

Department Name Use capital letters only	MANAGEMENT				Dept. Numeric Co	ode	3 2
Course Code M	Dept. Code+Course No       I     A     N     4     1     1	Number of weekly lecture hours	3	Number of wee lab/ tutorial hou	-	Number of Cree Hours	-
Course Web Site Use capital letters only	MAN.CANKAYA.EDU.TR				ECTS Credit		0 5

<b>Course Name</b> This information will appear i	in the printed catalogs and on the web online catalog.
English Name maximur	n 40 characters
Business Forecasting	
Abbreviated English N	ame maximum 15 characters
Forecast	
Turkish Name maximum	n 40 characters
İşletmede Tahmin Yör	ntemleri
Abbreviated Turkish N	Name maximum 15 characters
İştah	
<b>Prerequisites</b> (if any)	1st     2nd     3rd     4th
<i>Give course codes and</i> <i>check all that are</i> <i>applicable.</i>	X       Consent of the Instructor       Give others, if any.       Prior knowledge of management is strongly recommended.         Senior Standing       Senior Standing       Prior knowledge of management is strongly recommended.
<b>Co-requisites</b> (if any)	1 <sup>st</sup> 2nd 3 <sup>rd</sup> 4th
	Course Type Check all that are applicable
Must course for	Dept. Must course for other dept(s) X Elective course for Dept. X Elective course for other dept(s)

	Is the new cour	se <b>replacing</b> a form	er course in the curriculum?		
Former Course's Code	Dept. Code+Course No	Former Course's Name			
Is there any simi	lar course which has content <b>overlap</b> with other	courses offered by	the university?		Yes X No
Most Similar Course	Dept. Code+Course No	Course Name			
<b>Frequency</b> of O Check all semester	fferings s that the course is planned to be offered.		Fall	X Spring	Summer

			Firs	st Offering			
Academic Year	2020	-	2021	Semester		X Spring Fall	
Maximum Class Size P	roposed	30	Student Quota for Other De	epartments	10	Approximate Number of Students Expected to Take the Course 20	20

### Part II. Detailed Course Information

#### Justification for the proposal Maximum 80 words

For an organization to be able to prepare long-range plans and make forecasts, the knowledge of the selected statistical methods is necessary. For that reason, especially managers of the organizations should have a basic knowledge on data analysis as well as causal forecasting techniques and time series analysis. As a result, implementation of the similar techniques in real-life situations enable easier decision makings for managers.

#### **Course Description**

Provide a brief overview of what is covered during the semester. This information will appear in the printed catalogs and on the web online catalog. Maximum 60 words.

During the semester following a basic review of statistical concepts, data sources and patterns will be presented. This will be followed with smoothing methods and regression analysis in general. Towards the end of the semester time series and time series regression are among the topics to be mentioned. At the end of the semester practical implementations will be presented

# **Course Objectives**

Explain the aims of the course. Maximum 100 words.

The goal of this course is to make the understanding of the data analysis for business forecasting purposes in order to optimize decision making process. To do that, understanding of the analysis methods especially in long-range planning process is very important. Furthermore, importance of exploration of data patterns and choosing the right forecasting technique is very important in managing organizations in general. In this framework the course aims to overview different forecasting techniques along with their computer-based and practical implications for enabling students of the benefits mentioned.

# Learning Outcomes

Explain the learning outcomes of the course. Maximum 10 items.

Upon the completion of the course students will be able to

1-Use some statistical techniques for business problems

2-Use computer software for solving forecasting problems

3-Conduct a quantitative analysis of the organizational environment and markets in order to make decisions

4-Link the theoretical concepts and real-life problems

5-Analyze data for tendencies and patterns to use it future forecasts

6-Use the data analysis for making effective decisions

	Outline opics covered within each week.
Week	Topic(s)
1	Introduction to Forecasting
2	Review of Basic Statistical Concepts-I

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3	Review of Basic Statistical Concepts-II
4	Data Sources
5	Exploring Data Patterns and Choosing a Forecasting Technique
6	Moving Averages and Smoothing Methods
7	Regression Analysis
8	Multiple Regression
9	Time Series Analysis
10	Regression of Time Series Data
11	The Box-Jenkins (ARIMA) Methodology-I
12	The Box-Jenkins (ARIMA) Methodology-II
13	Judgmental Elements in Forecasting
14	Practical Implementation of Forecasting

<b>Textbook</b> (s) <i>List the textbook(s), if any, and other t</i>	related main course materials.			
Author(s)	Title	Publisher	Publication Year	ISBN
Hanke, J., Wichern, D.	Business Forecasting 8 <sup>th</sup> Ed.	Pearson	2008	978- 0132301206

<b>Reference Books</b> List the reference books as supplement	tary materials, if any.			
Author(s)	Title	Publisher	Publication Year	ISBN
Hanke, J., Reitsch A.G.	Business Forecasting 5 <sup>th</sup> Ed.	Prentice Hall	1995	0-13-324971-9
Wilson J.H.	Business Forecasting with Business ForecastX 6th ed.	McGraw-Hill/Irwin	2008	978-0073373645

# **Teaching Policy**

Explain how you will organize the course (lectures, laboratories, tutorials, studio work, seminars, etc.)

Three hours of lecturing. Case Studies about competitiveness of firms will be provided to students in order to foster discussion. Students are expected to read these cases before each lecture.

### Laboratory

Give the number of laboratory/studio hours required per week, if any, to do supervised laboratory, and list the names of the laboratories in which these sessions will be conducted.

Whenever necessary

**Computer Usage** Briefly describe the computer usage and the hardware/software requirements in the course.

Whenever necessary

Grading Policy List the assessment tools	and their percer	ntages that may give	e an idea about their relativ	e importance to	the end-of-semester	r grade.	_	
Assessment Tool	Quantity	Percentage	Assessment Tool	Quantity	Percentage	Assessment Tool	Quantity	Percentage
Case Discussion	10	10%						
Term Project	1	25%						
Midterm Exam	1	25%						
Final Exam	1	40%						

<b>ECTS Workload</b> <i>List all the activities considered under the ECTS.</i>			
Activity	Quantity	Duration (hours)	Total Workload (hours)
Attending Lectures (weekly basis)	14	3	42
Attending Labs/Recitations (weekly basis)	-	-	-
Preparation beforehand and finalizing of notes (weekly basis)	14	0.5	7
Collection and selection of relevant material (once)	1	2	2
Self-study of relevant material (weekly basis)	14	1	14
Homework assignments/Examples	10	2	20
Preparation for Quizzes	-	-	-
Preparation for Midterm Exams (including the duration of the exams)	1	15	15
Preparation of Term Paper/Case Study Report (including oral presentation)	1	20	20
Preparation of Term Project/Field Study Report (including oral presentation)	-	-	-
Preparation for Final Exam (including the duration of the exam)	1	30	30
	TOT	AL WORKLOAD	150
	TOTAL	WORKLOAD / 30	5
		ECTS Credit	5

	ve. Relate these two using the Likert Scale by marking with X in one of the five choices at the right. Program Qualifications		Co	ontributi	on	
No	(Specific to each program)	0	1	2	3	4
1	Acquire detailed knowledge concerning the economic and legal environment in which the business entities operate.				х	
2	Have profound theoretical background knowledge in basic business functions comprising organization and management, accounting, finance, marketing, and production and operations management.	X				
3	Obtain basic and intermediate level knowledge in quantitative techniques and methods that are predominantly used in business and management.				X	
4	Have more specific knowledge in one of the business functions (including the mastery of quantitative approaches) that he/she has chosen to specialize.				X	
5	Be able to apply the professional knowledge necessary to establish and/or run a business, or a department within a business entity.	X				
6	Be able to collect, edit, analyze, and interpret the representative data by applying both qualitative and quantitative methods in order to identify and clearly define the business problems and to develop insight and solutions.			x		
7	Be able to adequately communicate upon analyses, findings, inferences, and recommendations with his/her superiors, team members, colleagues, and subordinates both in written and oral form.					
8	Be thereby qualified to conduct research in business administration and management.			x		
9	Be appropriately trained to fulfill his/her responsibilities in team work both as a leader and an expert.	X				
10	Acquire the necessary skills to communicate effectively with the stakeholders of an organization so that he/she can become capable of analyzing the needs of the stakeholders and based on these analyses developing the objectives of the organization.			x		
11	Gain self-evaluation skills to identify exactly his/her self-learning and self-improvement needs, being at the same time equipped with the capacity to follow advanced courses and degree studies.			X		
12	Gain the ability to evaluate the organization that he/she is affiliated with and the ability to assess the knowledge that he/she has acquired in a critical perspective.				X	
13	Be able to use English, which is the medium of instruction in the department, at least in European Language Portfolio B1 General Level.					
14	Be able to use information technologies applicable to business administration and management at European Computer Usage License Basic Level.		x			
15	Be directed towards the behavioral patterns and responsibilities of a business administrator in terms of quality awareness, occupational safety and health, in-service training, environmental issues, social responsibilities, and social, organizational and business ethics.			x		
16	Be inclined to encourage innovation and continuous improvement within the organization in which he/she takes responsibilities.				X	

Contribution Scale to a Qualification: 0-None, 1-Little, 2-Medium, 3-Considerable, 4-Largest

Other Relevant Information

FORM: FEAS-CDF-MARCH-2011