



# ÇANKAYA UNIVERSITY

## Faculty of Economics and Administrative Sciences

### Course Definition Form

#### Part I. Basic Course Information

<b>Department Name</b>	BANKING AND FINANCE	<b>Dept. Numeric Code</b>	3 5										
<b>Course Code</b>	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px; text-align: center;">B</td> <td style="width: 20px; height: 20px; text-align: center;">A</td> <td style="width: 20px; height: 20px; text-align: center;">F</td> <td style="width: 20px; height: 20px; text-align: center;">3</td> <td style="width: 20px; height: 20px; text-align: center;">0</td> <td style="width: 20px; height: 20px; text-align: center;">9</td> </tr> </table>	B	A	F	3	0	9	<b>Number of Weekly Lecture Hours</b>	3	<b>Number of Weekly Lab/Tutorial Hours</b>	0	<b>Number of Credit Hours</b>	3
B	A	F	3	0	9								
<b>Course Web Site</b>	http:// bf.cankaya.edu.tr		<b>ECTS Credit</b>	0 6									

<b>Course Name and Other Course Information</b>	
<i>This information will appear in the printed catalogs and on the web online catalog.</i>	
<b>English Name</b>	Financial Econometrics I
<b>Turkish Name</b>	Finansal Ekonometri I
<b>Mode of Delivery</b>	Face to face
<b>Language of Instruction</b>	English

<b>Course Description</b>
<i>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.</i>
The course will introduce undergraduate students to the main topics in econometrics and financial econometrics. Both theory and empirical applications will be covered. Empirical applications will focus mostly on key topics in finance. Students will learn to use at least one statistical program for data analysis and model estimation.

<b>Prerequisites (if any)</b>	<i>Give course codes and check all that are applicable.</i>																																										
	1st	2nd	3rd	4th																																							
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	<input type="checkbox"/> Consent of the Instructor		<input type="checkbox"/> Senior Standing		<input type="checkbox"/> Give others, if any.																																						
<b>Co-requisites (if any)</b>	<i>Check all that are applicable</i>																																										
	1st	2nd	3rd	4th																																							
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	<input checked="" type="checkbox"/> Must course for dept. <input type="checkbox"/> Must course for other dept.(s) <input type="checkbox"/> Elective course for dept. <input checked="" type="checkbox"/> Elective course for other dept.(s)																																										

**Part II. Detailed Course Information****Course Objectives** *Maximum**100 words.*

The goal is to enable students to comprehend how statistical and econometric methods can be applied to financial data to solve problems arising in financial markets. Practical examples will be discussed in lectures to deepen the understanding of analyzing financial data using the statistical and econometric tools taught in this unit.

**Learning Outcomes***Explain the learning outcomes of the course. Maximum 10 items.*

1. Be able to analyze data to provide summary information
2. identify the issues involved when modelling the dynamics of financial markets
3. estimate relevant model, be able to test hypotheses, and interpret findings
4. undertake a research project that applies the techniques and analysis to a financial market of interest.

**Textbook(s)***List the textbook(s), if any, and other related main course material.*

Author(s)	Title	Publisher	Publication Year	ISBN
Chris Brooks	Introductory Econometrics for Finance.	Cambridge University Press	2008	ISBN-13: 9780521694681

**Reference Books***List, if any, other reference books to be used as supplementary material.*

Author(s)	Title	Publisher	Publication Year	ISBN
D. Asteriou and S.G. Hall	Applied Econometrics	Macmillan international	2015	9781137415462

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

This course will use lectures for theoretical work and computer lab oratories for empirical application.

**Laboratory/Studio Work***Give the number of laboratory/studio hours required per week, if any, to do supervised laboratory/studio work and list the names of the laboratories/studios in which these sessions will be conducted.***Computer Usage***Briefly describe the computer usage and the hardware/software requirements for the course.*

Students will learn to use at least one statistical program (e.g., Eviews, Stata) and also Microsoft Excel for data analysis and model estimation.

**Course Outline**

List the weekly topics to be covered.

Week	Topic(s)
1	Introduction to econometrics and financial econometrics
2	Simple regression, OLS, assumptions, and properties
3	Multiple regression, hypothesis testing, and confidence intervals, $R^2$
4	Violation of assumptions, Heteroscedasticity
5	Autocorrelation
6	Multicollinearity, misspecification, Testing for normality
7	Midterm Week
8	Structural breaks and parameter stability tests
9	Dummy variables
10	Simultaneous Equation models
11	Simultaneous Equation models
12	ARIMA(p,d,q) models and Box-Jenkins methodology
13	ARIMA(p,d,q) models and Box-Jenkins methodology
14	ARIMA(p,d,q) models and forecasting

**Grading Policy**

List the assessment tools and their percentages that may give an idea about their relative importance to the end-of-semester grade.

Assessment Tool	Quantity	Percentage	Assessment Tool	Quantity	Percentage	Assessment Tool	Quantity	Percentage
Quiz	3	%10						
Homework	2	%10						
Midterm	1	%35						
Final Exam	1	%45						

**ECTS Workload**

List all the activities considered under the ECTS.

Activity	Quantity	Duration (hours)	Total Workload (hours)
Attending Lectures ( <i>weekly basis</i> )	14	3	42
Attending Labs/Recitations ( <i>weekly basis</i> )	14	-	-
Preparation beforehand and finalizing of notes ( <i>weekly basis</i> )	14	1	14
Collection and selection of relevant material ( <i>once</i> )	1	3	3
Self study of relevant material ( <i>weekly basis</i> )	14	2	28
Homework assignments	2	6	12
Preparation for Quizzes	3	3	9
Preparation for Midterm Exams ( <i>including the duration of the exams</i> )	1	20	20
Preparation of Term Paper/Case Study Report ( <i>including oral presentation</i> )			
Preparation of Term Project/Field Study Report ( <i>including oral presentation</i> )			
Preparation for Final Exam ( <i>including the duration of the exam</i> )	1	20	20
<b>TOTAL WORKLOAD / 25</b>			148/25=5,92
<b>ECTS Credit</b>			<b>6</b>

**Program Qualifications vs. Learning Outcomes** Consider the program qualifications given below as determined in terms of learning outcomes and acquisition of capabilities for all the courses in the curriculum. Look at the learning outcomes of this course given above. Relate these two using the Likert Scale by marking with X in one of the five choices at the right.

No	Program Qualifications	Contribution				
		0	1	2	3	4
BAF-1	Be able to monitor and analyze the dynamics of banking and financial markets.				X	
BAF-2	Be able to utilize the basic knowledge that obtained with an interdisciplinary approach to business, economics, etc. in creating expertise in the fields of Banking and Finance in accordance with the requirements of the globalized business environment.		X			
BAF-3	Be able to identify and analyze the validity of theories related to the banking and finance and their relationships regarding current conditions.			X		
BAF-4	Have a good knowledge of the regulations and legislation underpinning the financial markets and institutions.			X		
BAF-5	Have the ability to efficiently perform all responsibilities of managerial finance within a corporation.					X
BAF-6	Be able to use quantitative techniques and methods that are predominantly used in banking and finance.				X	
BAF-7	Be able to use the theoretical and practical knowledge obtained in his/her field in analyzing and evaluating data.				X	
BAF-8	Be able to construct, analyze and interpret financial and economic models				X	
BAF-9	Be able to understand and evaluate the problems in banking and finance and to discuss and express his/her opinions clearly.			X		
BAF-10	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		
BAF-11	To maintain scientific, social, and ethical standards when collecting, interpreting, and disseminating financial information, and in application of financial ideas.				X	

Scale for contribution to a qualification: **0**-none, **1**-little, **2**-moderate, **3**-considerable, **4**-highest