



ÇANKAYA UNIVERSITY

Vocational High School

Course Definition Form

Part I. Basic Course Information

Department Name <i>Use capital letters only</i>	BANKING AND INSURANCE				Dept. Numeric Code	4 5				
Course Code	Dept. Code+Course No B A I 2 1 4				Number of weekly lecture hours	3	Number of weekly lab/tutorial hours	0	Number of Credit Hours	3
Course Web Site <i>Use capital letters only</i>					ECTS Credit	0 5				

Course Name

This information will appear in the printed catalogs and on the web online catalog.

English Name *maximum 40 characters*

Introduction to Quantitative Finance

Abbreviated English Name *maximum 15 characters*

Turkish Name *maximum 40 characters*

Ölçümsel Finansa Giriş

Abbreviated Turkish Name *maximum 15 characters*

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

Part II. Detailed Course Information**Justification for the proposal** *Maximum 80 words*

Quantitative Analysis for Finance course offers mathematical issues regarding financial products and even serves to the students the techniques of pricing financial instruments in risky environment.

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.

It is an important for investors to make accurate pricing of the financial instruments for taking rational investment decisions. This course offers how to be pricing of investment opportunities by using various mathematical and statistical techniques.

Course Objectives

Explain the aims of the course. Maximum 100 words.

The main aim of the course is to make close the students to the basic mathematics of financial assets such as bonds, futures products and foreign exchange.

Learning Outcomes

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

- Be able to analyse the financial investment products
- Understand the mathematical principles of pricing.
- Evaluate the financial risk statistically

Course Outline

List the topics covered within each week.

Week	Topic(s)
1	Derivatives
2	The Binomial Model
3	The Binomial Model
4	The Black-Scholes Model
5	The Black-Scholes Model
6	Mid-term Exam
7	Volatility Modelling
8	Fixed Income Products
9	Fixed Income Products
10	Swaps
11	Swaps
12	Interest Rate Modelling
13	Interest Rate Modelling
14	Final Exam

Textbook(s)

List the textbook(s), if any, and other related main course materials.

Author(s)	Title	Publisher	Publication Year	ISBN
Paul Wilmott	Introduces Quantitative Finance	Wiley	2007	9780470319581

Teaching Policy

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

Face to face learning and examination

Computer Usage

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

Using Computer for Power Point Documents and Projector Pursuiting

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
Homework	2	%10						
Quiz	1	%10						
Midterm	1	%30						
Final Exam	1	%40						

ECTS Workload

List all the activities considered under the ECTS.

Activity	Quantity	Duration (hours)	Total Workload (hours)
Attending Lectures (weekly basis)	14	3	42
Attending Labs/Recitations (weekly basis)	14	-	-
Preparation beforehand and finalizing of notes (weekly basis)	14	1	14
Collection and selection of relevant material (once)	1	2	2
Self study of relevant material (weekly basis)	14	2	28
Homework assignments	2	4	8
Preparation for Quizzes	1	4	4
Preparation for Midterm Exams (including the duration of the exams)	1	10	10
Preparation of Term Paper/Case Study Report (including oral presentation)	-	-	-
Preparation of Term Project/Field Study Report (including oral presentation)	-	-	-
Preparation for Final Exam (including the duration of the exam)	1	14	14
TOTAL WORKLOAD			122
TOTAL WORKLOAD / 25			25
ECTS Credit			5

Program Qualifications vs. Course's Learning Outcomes						
<i>Consider the below program qualifications determined in terms of learning outcomes of all the courses in the curriculum and capabilities. 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..</i>						
No	Program Qualifications (Specific to each program)	Contribution				
		0	1	2	3	4
BAI-1	Be able to monitor and analyze the dynamics of banking and financial markets.					x
BAI-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 Insurance in accordance with the requirements of the globalized business environment.				x	
BAI-3	Be able to identify and analyze the validity of theories related to the banking and insurance and their relationships with current conditions.				x	
BAI-4	Have a good knowledge of the regulations and legislation underpinning the financial markets and institutions.		x			
BAI-5	Be able to use quantitative techniques and methods that are predominantly used in banking and insurance.			x		
BAI-6	Be able to use the theoretical and practical knowledge obtained in his/her field in analyzing and evaluating data.				x	
BAI-7	Be able to construct, analyze and interpret financial and economic models					x
BAI-8	Be able to understand and evaluate the problems in baking and insurance and to discuss and express his/her opinions clearly.				x	
BAI-9	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		
BAI-10	To maintain scientific, social, and ethical standards when collecting, interpreting, and disseminating financial information, and in application of financial ideas.			x		
BAI-11	Be able to know the mechanism how the banking sector works in the global economy.	x				
BAI-12	Be able to have the practical implications of the insurance policy in financial sector.		x			

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