



# 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;">4</td> <td style="width: 20px; height: 20px; text-align: center;">2</td> <td style="width: 20px; height: 20px; text-align: center;">5</td> </tr> </table>	B	A	F	4	2	5	<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	4	2	5								
<b>Course Web Site</b>	http:// bf.cankaya.edu.tr		<b>ECTS Credit</b>	0 5									

#### Course Name and Other Course Information

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

<b>English Name</b>	CRM and Data Mining for Financial Services
<b>Turkish Name</b>	Finansal Hizmetler için MİY ve Veri Madenciliği
<b>Mode of Delivery</b>	Face to face
<b>Language of Instruction</b>	English

#### 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.*

The course is designed to teach computer skills necessary for a banking and finance students. Students will learn to use a spreadsheet software and statistical software required for data analysis.

<b>Prerequisites</b> (if any) <i>Give course codes and check all that are applicable.</i>	1st	2nd	3rd	4th																							
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table>							<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table>							<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table>							<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table>					
<input type="checkbox"/> Consent of the Instructor		<input type="checkbox"/> Senior Standing		<input type="checkbox"/> Give others, if any.																							
<b>Co-requisites</b> (if any)	1st	2nd	3rd	4th																							
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table>							<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table>							<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table>							<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table>					
<b>Course Type</b> <i>Check all that are applicable</i>	<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.*

This course will introduce Customer Relationship Management (CRM) and Data Mining methods with a special focus on financial services firms. Our objective in this course is to define what CRM is and explore requirements for a successful CRM implementation. Given the importance of business analytics within CRM, our second objective would be to understand the data mining methods and applications. The focus of data mining will be more on the application side than on the theoretical requirements.

**Learning Outcomes**

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

After successfully completing this course, the students will be able to:

- Identify requirements for a successful CRM implementation
- Identify and apply the correct data mining methods
- Transform information to knowledge

**Textbook(s)**

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

Author(s)	Title	Publisher	Publication Year	ISBN

**Reference Books**

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

Author(s)	Title	Publisher	Publication Year	ISBN

**Teaching Policy**

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

In conducting the course, lectures will be accompanied with examples and case studies.

**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.*

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**Computer Usage**

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

This course will use a spreadsheet and a statistical software

<b>Course Outline</b>	
<i>List the weekly topics to be covered.</i>	
Week	Topic(s)
1	CRM: definition, process and integral parts (knowledge and interaction management)
2	CRM: definition, process and integral parts (knowledge and interaction management)
3	What causes CRM failures and success? Empirical findings
4	Understanding customers and customer differences; Customer value; Segmentation
5	Customer loyalty and retention strategies
6	Winback and acquisition strategies
7	Midterm Week
8	Information technology and customer data; Data warehouse
9	Data mining, Visual methods, Data analysis
10	Targeting methods for customer acquisition
11	Targeting methods for customer acquisition; Lorenz curve
12	Segmentation methods (clustering, decision trees); Attrition (retention) prediction
13	Segmentation methods (clustering, decision trees); Attrition (retention) prediction
14	Optimization for campaign management

<b>Grading Policy</b>								
<i>List the assessment tools and their percentages that may give an idea about their relative importance to the end-of-semester grade.</i>								
Assessment Tool	Quantity	Percentage	Assessment Tool	Quantity	Percentage	Assessment Tool	Quantity	Percentage
Midterm Exam	1	30	Quiz	2	10			
Final Exam	1	35	Group project	1	15			
Class Participation	14	10						

<b>ECTS Workload</b>			
<i>List all the activities considered under the ECTS.</i>			
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	11
Collection and selection of relevant material ( <i>once</i> )	1	3	5
Self study of relevant material ( <i>weekly basis</i> )	14	2	15
Homework assignments	2	6	
Preparation for Quizzes	3	2	
Preparation for Midterm Exams ( <i>including the duration of the exams</i> )	1	14	15
Preparation of Term Paper/Case Study Report ( <i>including oral presentation</i> )	1	5	8
Preparation of Term Project/Field Study Report ( <i>including oral presentation</i> )	1	6	9
Preparation for Final Exam ( <i>including the duration of the exam</i> )	1	20	20
<b>TOTAL WORKLOAD / 25</b>			125/25=5
<b>ECTS Credit</b>			<b>5</b>

<b>Program Qualifications vs. Learning Outcomes</b> 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 baking 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