M.A. PROGRAM IN BUSINESS MANAGEMENT (WITH THESIS)
COURSE SYLLABUS FORM

Course Details				
Code	**Academic Year**			**Semester**
BM064	1			Elective
Title	**T**	**A**	**L**	**ECTS**
Multivariate Statistics	3	0	0	6

Language	English					
Level	**Undergraduate**		**Graduate**	**X**	**Postgraduate**	
Department / Program	Business Management					
Forms of Teaching and Learning	Face to face					
Course Type	**Compulsory**		**Elective**	**X**		
Objectives	The aim of this course is to make students familiar with various multivariate statistical methods.					
Content	Introduction to multivariate statistical methods, assumptions of multivariate statistical methods, multivariate regression and correlation analysis, logistic regression analysis, discriminant analysis, canonical correlation analysis, multivariate variance analysis, multivariate covariance analysis, factor analysis, cluster analysis, correspondence analysis					
Prerequisites	-					
Coordinator	Asst. Prof. Dr. Mehmet Hakan ÖZDEMİR					
Lecturer(s)	-					
Assistant(s)	-					
Work Placement	-					

Recommended or Required Reading	
Books / Lecture Notes	- Orhunbilge, N., Çok Değişkenli İstatistik Yöntemler, 2010, İstanbul Üniversitesi Yayınları - Alpar, R., Uygulamalı Çok Değişkenli İstatiksel Yöntemler, 2013, Detay Yayıncılık
Other Sources	-

Additional Course Material	
Documents	-
Assignments	-
Exams	-

Course Composition		
Mathematics und Basic Sciences		50%
Engineering		%
Engineering Design		%
Social Sciences		20%

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Educational Sciences		%
Natural Sciences		%
Health Sciences		%
Expert Knowledge		30%

Assessment

Activity	Count	Percentage (%)
Midterm Exam	1	40
Quiz		
Assignments		
Attendance		
Recitations		
Projects		
Final Exam	1	60
	Total	**100**

ECTS Points and Work Load

Activity	Count	Duration	Work Load (Hours)
Lectures	14	3	42
Self-Study	14	3	42
Assignments			
Presentation / Seminar Preparation			
Midterm Exam	1	48	48
Recitations			
Laboratory			
Projects			
Final Exam	1	48	48
		Total Work Load	**180**
		ECTS Points (Total Work Load / Hour)	**6**

Learning Outcomes

1	Students can make multivariate regression and correlation analysis.
2	Students can make logistic regression analysis.
3	Students can make discriminant analysis.
4	Students can make canonical correlation analysis.
5	Students can make multivariate analysis of variance.
6	Students can make multivariate covariance analysis.
7	Students can make factor analysis.

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8	Students can make cluster analysis.
9	Students can make correspondence analysis.
Weekly Content	
1	Introduction to multivariate statistical methods
2	Assumptions of multivariate statistical methods
3	Multivariate regression and correlation analysis
4	Multivariate regression and correlation analysis
5	Multivariate regression and correlation analysis
6	Logistic regression analysis
7	Discriminant analysis
8	Canonical correlation analysis
9	Mid-term exam
10	Multivariate analysis of variance
11	Multivariate covariance analysis
12	Factor analysis
13	Factor analysis
14	Cluster analysis
15	Correspondence analysis

Contribution of Learning Outcomes to Program Objectives (1-5)

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13
1	4	5	5	5	5	4	5	4	3	4	5	5	5
2	4	5	5	5	5	4	5	4	3	4	5	5	5
3	4	5	5	5	5	4	5	4	3	4	5	5	5
4	4	5	5	5	5	4	5	4	3	4	5	5	5
5	4	5	5	5	5	4	5	4	3	4	5	5	5
6	4	5	5	5	5	4	5	4	3	4	5	5	5
7	4	5	5	5	5	4	5	4	3	4	5	5	5
8	4	5	5	5	5	4	5	4	3	4	5	5	5
9	4	5	5	5	5	4	5	4	3	4	5	5	5

Contribution Level	1: Low 2: Low-intermediate 3: Intermediate 4: High 5: Very High
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Date of Compilation:	04.06.2020