

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

Course Details				
Code	Academic Year			Semester
BM070	1			Elective
Title	T	A	L	ECTS
Simulation Techniques in Business	3	0	0	6
Language	English			
Level	Undergraduate		Graduate	X
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 provide students with the ability to analyze and interpret simulation models by building them.			
Content	The concept of simulation, statistical information required to create a simulation model, probability theory, discrete and continuous probability distributions, random number and variable generation, random event simulation with spreadsheets, simulation application examples			
Prerequisites	-			
Coordinator	Asst. Prof. Dr. Mehmet Hakan ÖZDEMİR			
Lecturer(s)	-			
Assistant(s)	-			
Work Placement	-			
Recommended or Required Reading				
Books / Lecture Notes	<ul style="list-style-type: none"> - Winston, W. L., Albright, S. C., Practical Management Science Sixth Edition, 2017, Cengage - Esen, H. Ö., Yöneticiler için Bilgisayar Destekli Karar Modelleri, 2008, Çağlayan Kitabevi - Ayvaz, B., Kuşakçı, A. O., Borat, O., Excel, Matlab, Arena ve Simulink Uygulamalarıyla Sistem Benzetimi, 2017, Nobel Akademik Yayıncılık - Winston, W. L., Microsoft Excel 2013: Data Analysis and Business Modeling, 2014, Microsoft 			
Other Sources	-			
Additional Course Material				
Documents	-			
Assignments	-			
Exams	-			
Course Composition				
Mathematics und Basic				40%

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Sciences			
Engineering			%
Engineering Design			%
Social Sciences			20%
Educational Sciences			%
Natural Sciences			%
Health Sciences			%
Expert Knowledge			40%
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 define the concept of simulation.		
2	Students have knowledge about simulation models and simulation stages.		
3	Students have knowledge about discrete and continuous probability distributions.		

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4	Students can make various simulation applications.												
Weekly Content													
1	The concept and the stages of simulation												
2	Statistical information required to create a simulation model												
3	Probability theory												
4	Discrete and continuous probability distributions												
5	Random number and variable generation												
6	Random event simulation with spreadsheets												
7	Simulation application examples												
8	Simulation application examples												
9	Mid-term exam												
10	Simulation application examples												
11	Simulation application examples												
12	Simulation application examples												
13	Simulation application examples												
14	Simulation application examples												
15	Simulation application examples												
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	5	5	4	4	5	5	5	5
2	4	5	5	5	5	5	5	4	4	5	5	5	5
3	4	5	5	5	5	5	5	4	4	5	5	5	5
4	4	5	5	5	5	5	5	4	4	5	5	5	5
Contribution Level		1: Low 2: Low-intermediate 3: Intermediate 4: High 5: Very High											
Compiled by:		Asst. Prof. Dr. Mehmet Hakan ÖZDEMİR (Head of Sub-Department Quantitative Methods)											
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