SIMULATION AND PLANNING

1	Course Title:	SIMULATION AND PLANNING
2	Course Code:	EKO6113
3	Type of Course:	Optional
4	Level of Course:	Third Cycle
5	Year of Study:	1
6	Semester:	1
7	ECTS Credits Allocated:	5.00
8	Theoretical (hour/week):	2.00
9	Practice (hour/week):	0.00
10	Laboratory (hour/week):	0
11	Prerequisites:	No
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Doç. Dr. VESİLE SİNEM ARIKAN KARGI
15	Course Lecturers:	Yok
16	Contact information of the Course Coordinator:	vesa@uludag.edu.tr Bursa Uludağ Üniversitesi İktisadi ve İdari Bilimler Fakültesi A Blok 16059 Nilüfer/Bursa
17	Website:	
18	Objective of the Course:	The objective of the course is to develop the ability of the student to create model and to analyze with simulation program MSSharp in order to analyze different type of management systems .
19	Contribution of the Course to Professional Development:	To be able to develop the ability to construct and interpret models using the simulation technique
20	Learning Outcomes:	

		1	To be able to understand the computer simulation in management science
		2	To be able to understand the computer simulation approach
		3	To be able to understand modelling applications
		4	To be able to understand the Static Monte Carlo Simulation
		5	To be able to understand the Discrete event simulation modelling
		6	To be able to understand the Logic of discrete event simulation software
		7	To be able to understand the Sampling methods
		8	To be able to analyze simulation outputs
		9	
		10	

21	Course Content:	

Course Content:		
Week	Theoretical	Practice
1	System Analysis	
2	Simulation Basic Concepts	

3	Statistical Information	
4	Confidence Interval and Confidence Limits	
5	Collection of Data	
6	Probability Distributions	
7	Random Numbers	
8	Monte Carlo Simulation	
9	Setting Up the Simulation Model	
10	Queuing Theory	
11	Output Analysis	
12	Introduction of a Simulation Program	
13	Application in Simulation Program- 1	
14	Application in Simulation Program 2	

22	Textbooks, References and/or Other Materials:	1. Kenneth E. Kendall, Julie E. Kendall ,Systems Analysis And Design , New Jersey : Prentice Hall , 2002. 2. Richard Bronson, Govindasami Naadimuthu ,Schaum's Outline Of Thory And Problems Of Operations Research , New York , Mcgraw Hill , 1997. 3. Michael Pidd, Computer Simulation İn Management Science, 5. Edition, John Wiley&Sons,2004. 4. Roger J. Brooks, Steward Robinson, Simulation, İnventory control /Colin Lewis, New York: Palgrave, 2001. 5. Micro Saint Sharp Manuel.
23	Assesment	

TERM LEARNING ACTIVITIES	NUMBER	WEIGHT
Midterm Exam	0	0.00
Quiz	0	0.00
Home work-project	0	0.00
Final Exam	1	100.00
Total	1	100.00
Contribution of Term (Year) Learning Activities to Success Grade	0.00	
Contribution of Final Exam to Success Grade	100.00	
Total	100.00	
Measurement and Evaluation Techniques Used in the Course	Classic Exam	

24	**ECTS / WORK LOAD TABLE**

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	2.00	28.00
Practicals/Labs	0	0.00	0.00
Self study and preperation	14	5.00	70.00
Homeworks	1	20.00	20.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	0	0.00	0.00
Others	0	0.00	0.00
Final Exams	1	25.00	25.00
Total Work Load			143.00
Total work load/ 30 hr			4.77
ECTS Credit of the Course			5.00

25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS															
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16
ÖK1	4	4	5	4	4	4	4	4	4	4	3	4	0	0	0	0
ÖK2	4	5	4	4	4	5	4	4	4	4	4	4	0	0	0	0
ÖK3	4	5	5	4	4	4	4	4	4	4	4	5	0	0	0	0
ÖK4	4	4	4	4	4	5	5	4	4	4	5	5	0	0	0	0
ÖK5	4	4	4	4	5	5	4	4	4	4	4	4	0	0	0	0
ÖK6	4	5	4	5	4	4	4	4	4	4	5	5	0	0	0	0
ÖK7	5	4	5	4	4	4	4	4	5	4	5	4	0	0	0	0
ÖK8	5	4	4	4	4	4	4	4	4	5	3	5	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																

Contribution Level:	1 very low	2 low	3 Medium	4 High	5 Very High