AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Stochastic Process								
Course Code	İŞLE601			Couse Level		Third Cycle (Doctorate Degree)			
ECTS Credit	5	Workload	127 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	This course offers students the skills and competence by providing an overview of the stochastic processes for modeling and solving problems is to be able to use stochastic processes.								
Course Content	This course is the definition of stochastic processes, scope and covers the basic methods and tools.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion								
Name of Lecturer(s)									

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading	
1	Winston, W.L., Operations Research, Duxbury Press, 1994.
2	Winston, W.L., Operations Research, Duxbury Press, 1994.

Week	Weekly Detailed Course Contents	
1	Theoretical	The aim of the course, and.
	Preparation Work	Winston, W.L., Operations Research, Duxbury Press, 1994.
2	Theoretical	Review of basic probability
	Preparation Work	Winston, W.L., Operations Research, Duxbury Press, 1994.
3	Theoretical	Review of basic probability
	Preparation Work	Winston, W.L., Operations Research, Duxbury Press, 1994.
4	Theoretical	Poisson process and its properties
	Preparation Work	Winston, W.L., Operations Research, Duxbury Press, 1994.
5	Theoretical	Poisson process and its properties
	Preparation Work	Winston, W.L., Operations Research, Duxbury Press, 1994.
6	Theoretical	Markov process and its properties
	Preparation Work	Winston, W.L., Operations Research, Duxbury Press, 1994.
7	Theoretical	Markov process and its properties
	Preparation Work	Winston, W.L., Operations Research, Duxbury Press, 1994.
8	Intermediate Exam	Midterm Exams
9	Theoretical	Markov process and its properties
	Preparation Work	Winston, W.L., Operations Research, Duxbury Press, 1994.
10	Theoretical	Markov processes, the implementation of business problems
	Preparation Work	Winston, W.L., Operations Research, Duxbury Press, 1994.
11	Theoretical	Markov processes, the implementation of business problems
	Preparation Work	Winston, W.L., Operations Research, Duxbury Press, 1994.
12	Theoretical	Stochastic inventory models
	Preparation Work	Winston, W.L., Operations Research, Duxbury Press, 1994.
13	Theoretical	Stochastic inventory models
	Preparation Work	Winston, W.L., Operations Research, Duxbury Press, 1994.
14	Theoretical	Queueing models
	Preparation Work	Winston, W.L., Operations Research, Duxbury Press, 1994.
15	Theoretical	Queueing models
	Preparation Work	Winston, W.L., Operations Research, Duxbury Press, 1994.
16	Final Exam	Final Exams

17	Final Exam	Final Exams

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	2	3	70
Midterm Examination	1	25	1	26
Final Examination	1	30	1	31
			Total Workload (Hours)	127
			[Total Workload (Hours) / 25*] = **ECTS**	5
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	The general scope of stochastic processes, principles and methods knows.
2	Knows the structures of the theoretical methods of stochastic processes.
3	Stochastic processes gains the ability to apply business life.
4	Will be able to analyze homogeneous and nonhomogeneous Markov processes.
5	Will be able to analyze birth-and-death processes and solve Kolmogorov's differential equations.

Programme Outcomes *(Business Administration Doctorate)*	
1	To be able do and report scientific research and acquire skills for doing independent work
2	Have ethical sensitivity in plannning and carrying out a scientific work
3	Be able to use the qualitative and quantitative reseach techniques appropriately in scientific work
4	Acquire team working skills to carry out disciplinary and interdisciplinary work
5	Develop competencies for preparing projects for business
6	Acquire skills for intiative, creativity and acting independent
7	Be able to adjust to new circumstances and gain problem solving skills
8	Be able to convey thoughts and suggestions supported by the qualitative and quantitative data effectively to the experts and non-experts of the area using written, verbal and non-verbal communication skills
9	Gain the necessary experience and capabilities for a productive and competent career in teaching and research
10	Be able to select and use the appropriate mathematical and statiscal methods in scientific work.

Contribution of Learning Outcomes to Programme Outcomes *1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High*

	L1	L2	L3	L4	L5
P1	4	3	3	3	3
P2	3	3	3	3	3
P3	4	5	3	3	3
P4	2	3	5	4	3
P5	2	3	2	4	4
P6	2	3	2	3	4
P7	2	3	3	4	4
P8	3	3	3	3	3
P9	5	2	2	4	4
P10	2	3	3	3	3