AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Probability Theory								
Course Code	UEK511		Couse Level	Second Cycle (Master's Degree)					
ECTS Credit	5	Workload	126 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course									
Course Content									
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation)								
Name of Lecturer(s)									

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

Recommended or Required Reading	
1	Mustafa Sevüktekin, Ekonometriye Giriş, Dora Yayınları, 2013, Bursa.

Week	Weekly Detailed Course Contents	
1	Theoretical	Independence; independence for sequences and families of events and random variables
2	Theoretical	Zero-one laws
3	Theoretical	Convergence, almost everywhere convergence
4	Theoretical	Convergence in the mean and convergence in distribution
5	Theoretical	Relations among convergence types, law of large numbers
6	Theoretical	Characteristic functions, inversion theorem
7	Theoretical	Midterm
8	Theoretical	Weak law of large numbers, central limit theorem
9	Theoretical	Infinitely divisible distributions, Raikov's theorem
10	Theoretical	The canonical representation of characteristic function of an infinitely divisible distribution
11	Theoretical	Stable distributions
12	Theoretical	Conditional expected values and condfitional probabilities
13	Theoretical	Decomposition of conditional expected values
14	Theoretical	Expected values of kernels and conditional distributions

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	6	3	126
			Total Workload (Hours)	126
			[Total Workload (Hours) / 25*] = **ECTS**	5
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	
2	
3	
4	
5	

Programme Outcomes *(Applied Econometry Interdisciplinary Master)*	
1	Will be able to collect data related to social and economic topics.

2	Will be able to get raw data ready for statistical and econometric analysis.
3	Will be able to build econometric models that describe the data generating process behind data.
4	Will be able to interpret the results that are obtained through econometric analysis.
5	Will be able to conduct an independent empirical research project from start to finish.

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	2	2	4	1	3
P2	3	5	3	2	4
P3	2	4	2	5	3
P4	3	3	1	3	2
P5	4	2	5	4	2