AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Blockchain Technologies						
Course Code	İKP627		Couse Level	Third Cycle (Doctorate Degree)			
ECTS Credit	5	Workload	125 *(Hours)*	Theory	3	Practice	0	Laboratory	0

Objectives of the Course	The aim of the course is to inform students about technological developments and innovations in the world of finance and to raise their awareness. The most important pillar of this change is to enter the new financial ecosystem by taking the blockchain (distributed database that enables intermediary transaction tracking) technology and cryptocurrencies, the first application example, from a multidisciplinary perspective.
Course Content	The combination of finance and technology (Fintech), The values that fintech adds to users lives, Fintech examples in the world and Turkey, the development of blockchain technology, What is this Bitcoin? Basic things to know about Bitcoin, Key Features of Bitcoin-led Cryptocurrencies and Blockchain infrastructures, Block structure in Blockchain, Blockchain types, Issues that will be affected by Blockchain technology, Blockchain applications and other cryptocurrencies, Wallet types, differences between Bitcoin and Ethereum, examples of some altcoins.
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	Blockchain 101 - Ahmet Usta, Serkan Doğantekin, BKM yayınları, 2018.

Week	Weekly Detailed Course Contents	
1	Theoretical	Giving information about course and materials to be used.
2	Theoretical	New combination of finance and technology: Fintech
3	Theoretical	New combination of finance and technology: Fintech
4	Theoretical	What is this Bitcoin? Basic Things to Know About Bitcoin
5	Theoretical	Key features of Bitcoin-led Cryptocurrencies and Blockchain infrastructures
6	Theoretical	What is this Blockchain? Key types and hash value
7	Theoretical	Block structure, proof types, blockchain types, and issues affected by blockchain
8	Intermediate Exam	Midterm Exam
9	Theoretical	Blockchain apps and other cryptocurrencies
10	Theoretical	Wallet types
11	Theoretical	Differences between Bitcoin and Ethereum, examples of some altcoins
12	Theoretical	Differences between Bitcoin and Ethereum, examples of some altcoins
13	Theoretical	Blockchain Usage Areas: Digital Identity.
14	Theoretical	Blockchain Usage Areas: Blockchain in Environment and Health Sectors
15	Theoretical	Blockchain Usage Areas: Blockchain in Supply Chain and Donation
16	Final Exam	Final Exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	2	3	70
Individual Work	12	1	2	36
Midterm Examination	1	8	1	9

Final Examination	1	9	1	10
			Total Workload (Hours)	125
			[Total Workload (Hours) / 25*] = **ECTS**	5

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	Experience the technological innovations that are experienced in financial markets.
2	Learn the properties of blockchain technology.
3	Learn the philosophy, sociology and technology of cryptocurrencies.
4	Learn the opportunities and risks that the blockchain tech can create.
5	Determine the outputs of the blockchain tech to the financial sector.

Programme Outcomes *(Economic Policy Doctorate)*

1	To be able to understand and interpret basic economic concepts, theories and methods
2	To be able to apply mathematical, statistical and econometric analysis tools to economic problems
3	To be able to interpret the structure and characteristics of the markets in the economy by understanding current economic events.
4	To be able to describe the role of innovation, creativity and technology in the dynamic global economy.
5	Ability to prepare projects and acquire creativity skills
6	Ability to analyze macro and micro economic developments
7	Being able to adopt the philosophy of lifelong learning

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	5	5	4	5	3
P2	5	4	4	3	3
P3	3	4	4	5	3
P4	3	4	3	3	3
P5	3	4	3	3	3
P6	3	4	3	3	3
P7	3	4	3	3	3