ANKARA YILDIRIM BEYAZIT UNIVERSITY – DEPARTMENT OF ECONOMICS
COURSE SYLLABUS

Course Code	Course Title	Course Type	ECTS Credits	Prerequisite Information	Date of Preparation
ECON327	DIGITAL ECONOMY	Elective	6	-	15 September 2025

Instructor of the Course & E-Mail Address	Prof.Dr. Fatih Cemil Özbuğday & fcozbugday@aybu.edu.tr
Office Hours & Office Room	Friday 14:00-15:00 & B330
Course Content and Objectives	This course provides an introduction to the digital economy. It describes how the digital economy affects society and markets. The course draws upon knowledge of microeconomics, industrial organization, management science, telecommunications, and business modeling. The students will learn how information and communication technologies shape buying and selling. The course deals with the basic theory of the digital economy (network effects, value creation, etc.). It then discusses specific topics such as big data economics, user-generated content, etc. Finally, the course focuses on the digitization of creative industries. By the end of this course, students are expected to: • Understand the functioning of the digital economy. • Learn the main economic principles that govern the digital economy. • Analyze the impact of the digital economy on the world economy.
Textbook(s)	• Øverby, H. (2021). Introduction to Digital Economics: Foundations, Business Models and Case Studies. Springer Nature. • Peitz, M., & Waldfogel, J. (Eds.). (2012). The Oxford Handbook of the Digital Economy. Oxford University Press. • Towse, R., & Handka, C. (Eds.). (2013). Handbook on the Digital Creative Economy. Edward Elgar Publishing.
Teaching Methods and Techniques	• Lecture and guided discussion: Short presentation of the weekly theoretical framework, followed by interactive question–answer sessions and discussion of concepts through real-world examples. • Case study analysis: Structured discussions of contemporary cases related to digital platforms, business models, and sectoral transformations (e.g., multi-sided platforms, network effects, creative economy). • Problem-solving sessions: Numerical examples and small model exercises on topics such as network effects, two-sided pricing, and path dependence. • Formative feedback on policy memo/analytical assignment: One term paper (policy brief or case analysis) with interim feedback provided. • Summarization and synthesis activities: Review and integrative discussions before midterm and final examinations.

Course Learning Outcomes	1	Explain the fundamental concepts, institutions, and mechanisms of the digital economy and illustrate them with relevant examples
	2	Analyze production technologies and cost structures of digital goods and services using basic microeconomic models
	3	Solve and interpret pricing, matching, and strategic interaction problems in multi-sided digital platforms
	4	Evaluate the implications of big data, artificial intelligence, and generative models for market performance and welfare, and draft a concise policy brief
	5	Analyze the impact of digitalization on business processes and competition in manufacturing, finance, and creative industries
	6	Discuss potential market failures and regulatory approaches in digital markets (e.g., data portability, platform governance, competition concerns)

Program Outcomes Contributed by the Course	**Program Outcomes (PO)**	
	1	Ability to explain the concepts and theories used in micro and macro economics disciplines
	2	Ability to reach advanced conceptual, theoretical and empirical knowledge in economics discipline and its branches using up-date academic resources, and ability to process this knowledge
	3	Ability to collect data, conduct analysis, make scientific evaluations and suggest policy

		implications using economic research methods
	4	Ability to follow and interpret national and international economic indicators and developments
	5	Ability to apply mathematical, statistical and econometric analysis tools to economic problems
	6	Ability to define the concepts of administrative and financial law and use this knowledge in business life
	7	Having an English language proficiency at B1 level ("European Language Portfolio Global Scale," Level B1), and ability to follow academic developments related to Economics discipline and communicate
	8	Having basic knowledge about other social science disciplines and ability to benefit from them in Economics discipline
	9	Ability to use computer software and other information and communication technologies
	10	Having written and verbal communication skills, having effective presentation skills, and ability to effectively transfer knowledge and ideas to others
	11	Being an individual with professional and ethical responsibility
	12	Being a credible, creative, objective and critical individual who can contribute to social developments
Contribution of the Course to Field Instruction	The course contributes to the field instruction component of the Economics program by reinforcing students' capacity to apply theoretical and analytical tools of microeconomics to the context of digital transformation. It supports the attainment of program learning outcomes related to analytical reasoning, data literacy, and policy interpretation by linking economic theory with empirical developments in digital markets, platforms, and data-driven business models. Through a systematic integration of conceptual analysis and real-world applications, the course enhances students' ability to evaluate the implications of digitalization for competition, innovation, and economic welfare.	

Topics Covered in the Course	1. Week	Introduction to the Course
	2. Week	Introduction to Digital Economy and Digital Economics
	3. Week	Understanding Digital Markets: Goods, Services and Mechanisms
	4. Week	Production Models for Digital Goods and Services
	5. Week	Business Models in Digital Markets
	6. Week	Multisided Digital Platforms (I)
	7. Week	Multisided Digital Platforms (II)
	8. Week	Path Dependence and Barriers to Change
	9. Week	Midterm Week
	10. Week	Big Data Economics, Artificial Intelligence Advancements, and the Rise of Generative Models (I)
	11. Week	Big Data Economics, Artificial Intelligence Advancements, and the Rise of Generative Models (II)
	12. Week	Digital Transformation of the Manufacturing Economy
	13. Week	Digital Finance
	14. Week	Digitization in the Creative Economy
	15. Week	Recap

Course Evaluation Criteria	In-Term Studies	Quantity	Percentage %	
	Mid-terms	1	%30	
	Quizzes		%	
	Assignments		%	
	Attendance		%	
	Practice		%	
	Project	1	%20	
	Final examination	1	%50	
	Total		**100%**	

Disability Policy	If you have a documented disability (e.g., visual, hearing, or physical impairment, etc.) that may influence your performance in this course, it is recommended to meet with the Engelsiz AYBU (https://aybu.edu.tr/engelsiz/content_list-327-yildirim-beyazit-universitesi-engelsiz-universite-birimi-yonergesi.html) to arrange for reasonable conditions (such as accommodation, etc.) to ensure an equitable opportunity to meet all the requirements of this course. You may also contact the local authority of the Faculty of Political Sciences. You should communicate your needs to the course instructor as soon as possible to ensure that any course needs concerning exams, lecture materials, etc. are met.