



**MINISTRY OF SCIENCE AND EDUCATION  
OF THE REPUBLIC OF AZERBAIJAN  
“NAKHCHIVAN” UNIVERSITY  
COURSE SYLLABUS**

Approved by: \_\_\_\_\_ (head of the department)  
Tarix: 27 yanvar 2023

<b>Description of subject</b>	<b>Subject, credit</b>	Modern Economy, 4 credits
	<b>Faculty</b>	Economy
	<b>Speciality</b>	Economy
	<b>Degree level (Bachelor, master)</b>	Bachelor
	<b>Course</b>	I
	<b>Semestr</b>	II
	<b>Lecturer</b>	Elshan Nuraddin Nasirov
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<b>Lesson days and hours</b>	III day 1st hour, V day 1st hour	
<b>Section</b>	English	
<b>Base/ option</b>	Base	
<b>Required materials</b>	<p>Main:</p> <ol style="list-style-type: none"> <li>1. Lecture materials</li> <li>2. Daron Acemoglu "Modern Economic Growth" (2009), Princeton University Press</li> <li>3. Acemoglu, Daron, and Veronica Guerrieri (2008) "Capital Deepening and Non-Balanced Economic Growth." Journal of Political Economy</li> <li>4. Deaton, Angus S., and John Muellbauer (1980) Economics and Consumer Behavior. Cambridge: Cambridge University Pres</li> </ol> <p>Additional materials:</p> <ol style="list-style-type: none"> <li>1. DeNatale, D., Wassal G., (2007), The Creative Economy: A New Definition, Boston, New England, Foundation for the Arts.</li> <li>2. UNDP/UNCTAD – United Nations Development Programme (2008) Creative Economy Report 2008: The Challenge of Assessing the Creative Economy Towards Informed Policy-making, New York, UNDP, UNCTAD.</li> <li>3. Doms, Mark and Timothy Dunne and Kenneth Troske: "Workers, Wages and Technology." Quaterly Journal of Economics, 2018</li> <li>4. Durlauf, Steven and Paul A. Johnson: "Multiple Regimes and Cross-Country Growth Behavior." Journal of Applied Econometrics, N 10, 2020</li> </ol>	
<b>Internet sources</b>	<a href="https://www.scirp.org/journal/me/">https://www.scirp.org/journal/me/</a> <a href="https://www.collinsdictionary.com/dictionary/english/modern-economy">https://www.collinsdictionary.com/dictionary/english/modern-economy</a> <a href="https://www.scirp.org/journal/paperinformation.aspx?paperid=122149">https://www.scirp.org/journal/paperinformation.aspx?paperid=122149</a>	
<b>Summary of the subject</b>	First of all, the subject reveals the essence of economic growth and long-term economic development. The process of economic growth and the sources of differences in the economic performance of different countries are among the most interesting, important and complex areas of modern social science.	
<b>Objectives of the subject</b>	The main goal of the course is to introduce students to the main issues and to the theoretical tools needed to study it. Thus, the aim of the course is to give students a solid foundation for dynamic economic analysis, since only such training will allow them to seriously study economic growth and economic development.	

<b>Outcomes</b>	Mastering the subject "Modern Economics" will allow students to better understand the essence of the processes, current trends and mechanisms for the development of the modern world economy.			
<b>Means of teaching</b>	<b>Lecture</b>	30 hours		
	<b>Seminar</b>	30 hours		
	<b>Practical exercise</b>			
	<b>Simulation</b>			
	<b>Project</b>			
	<b>Others</b>			
<b>Grading</b>	<b>Subject mastery</b>	Percentage rate (%) or points		
	<b>Maximum points</b>	100		
	<b>1. Maximum points accumulated during the semester</b>	50 points (50%)		
	<b>- Maximum points for attendance</b>	10 points (10%)		
	<b>- Maximum points for students' self study work</b>	10 points (10%)		
	<b>- Maximum score according to the results of seminar and laboratory lessons</b>	30 points (30%)		
	<b>Note: in seminar classes, if the student has at least 3 (three) mark in the journal, points are calculated for this type of teaching. Otherwise, no points are calculated for the student.</b>			
	1. Maximum points according to exam results	50 points (50%)		
	2. The rule of mastering the subject: students whose total points obtained during the semester are over 50 according to the exam results are considered to have mastered the subject.			
	below 51 – “inadequate” – F			
- 51 – 60 - “fairly good” – E				
- 61 – 70 – “sufficient” – D				
- 71 – 80 – “good” – C				
- 81 – 90 – “very good” – B				
- 91 – 100 – “excellent” – A				
		<b>Total:</b>	<b>100 bal (100%)</b>	
<b>Grading methods</b>	Written exam			
<b>Qaydalar</b>	<p><b>Attendance:</b> Students who do not attend more than 25% of all hours allotted for the subject are not admitted to the exam.</p> <p><b>Missed Exams or Assignments:</b> A student must give notice in advance if is unable to attend a scheduled presentation or exam. Full class attendance and completion of assigned homework is required.</p> <p>It should refer to the sources used in the research work and the prepared projects. However, any research paper containing only references and citations cannot be accepted without analysis by the student.</p> <p>Transfer during the tests will be penalized, including the possibility of cancellation of the student's test result, if the prescribed rules are not followed.</p> <p>The topics of the presentations / project documents will be determined in advance by the teacher teaching the subject. Cooperation with other students may be allowed if it is agreed with the teacher in advance.</p>			
<b>Thematic planning</b>				
<b>Weeks</b>	<b>Date</b>	<b>Topics</b>	<b>Required materials</b>	
<b>1</b>	17.02.2023	<p><b>Topic 1. Introduction to the subject</b></p> <p>Features of a modern economy. Economic Growth and Economic Development. Cross-Country Income Differences. Income and Welfare. Economic Growth and Income Differences. Origins of Today's Income Differences and World Economic Growth. Correlates of Economic Growth. Fundamental</p>	<p>1. Lecture materials</p> <p>2. Daron Acemoglu "Modern Economic Growth", Published by Princeton University Press, 41 William Street, Princeton, New Jersey, 2009</p> <p>3. Aizhan Khoich, Ali Eren Alper, Ahmet Arif Eren "Perspectives On</p>	

		Causes of Inequality. The Agenda of Modern Economy	Modern Economy", IJOPEC Publication No: 2020/11, First Edition, September 2020
2	24.02.2023	<p><b>Topic 2. Fundamental Determinants of Differences in Economic Performance</b></p> <p>Immediate and fundamental reasons for the development of the modern world economy. Economies of scale, population, technology and global growth. Four fundamental reasons. Influence of institutions on economic growth. What types of economic institutions exist. Disease and development. The political economy of institutions.</p>	<ol style="list-style-type: none"> <li>1. Lecture materials</li> <li>2. Daron Acemoglu "Modern Economic Growth", Published by Princeton University Press, 41 William Street, Princeton, New Jersey, 2009</li> <li>3. Aizhan Khoich, Ali Eren Alper, Ahmet Arif Eren "Perspectives On Modern Economy", IJOPEC Publication No: 2020/11, First Edition, September 2020</li> </ol>
3	03.03.2023	<p><b>Topic 3. Dynamic Programming and Optimal Growth</b></p> <p>Brief Review of Dynamic Programming. Dynamic Programming Theorems. The Contraction Mapping Theorem and Applications. Proofs of the Main Dynamic Programming Theorems. Fundamentals of Dynamic Programming. Optimal Growth in Discrete Time. Competitive Equilibrium Growth. Another Application of Dynamic Programming: search for Ideas.</p>	<ol style="list-style-type: none"> <li>1. Lecture materials</li> <li>2. Daron Acemoglu "Modern Economic Growth", Published by Princeton University Press, 41 William Street, Princeton, New Jersey, 2009</li> <li>3. Aizhan Khoich, Ali Eren Alper, Ahmet Arif Eren "Perspectives On Modern Economy", IJOPEC Publication No: 2020/11, First Edition, September 2020</li> </ol>
4	10.03.2023	<p><b>Topic 4. Human Capital and Economic Growth</b></p> <p>A Simple Separation Theorem. Schooling Investments and Returns to Education. The Ben Porath Model. Neoclassical Growth with Physical and Human Capital. Capital-Skill Complementarity in an Overlapping Generations Model. Physical and Human Capital with Imperfect Labor Markets. Human Capital Externalities. Nelson-Phelps Model of Human Capital.</p>	<ol style="list-style-type: none"> <li>1. Lecture materials</li> <li>2. Aizhan Khoich, Ali Eren Alper, Ahmet Arif Eren "Perspectives On Modern Economy", IJOPEC Publication No: 2020/11, First Edition, September 2020</li> <li>3. Svetlana Trajkovic: "Modern Economy: FEATURES AND DEVELOPMENTS", Journal of Process Management – New Technologies, International, Vol. 4, No.2, 2016</li> </ol>
5	17.03.2023	<p><b>Topic 5. Models of Competitive Innovations</b></p> <p>The Baseline Model of Competitive Innovations. A One-Sector Schumpeterian Growth Model. Step-by-Step Innovations. The Lab Equipment Model of Growth with Product Varieties. Growth with Knowledge Spillovers. Growth without Scale Effects. Growth with Expanding Product Varieties.</p>	<ol style="list-style-type: none"> <li>1. Lecture materials</li> <li>2. Daron Acemoglu "Modern Economic Growth", Published by Princeton University Press, 41 William Street, Princeton, New Jersey, 2009</li> <li>3. Aizhan Khoich, Ali Eren Alper, Ahmet Arif Eren "Perspectives On Modern Economy", IJOPEC Publication No: 2020/11, First Edition, September 2020</li> <li>4. Svetlana Trajkovic: "Modern Economy: FEATURES AND DEVELOPMENTS", Journal of Process Management – New</li> </ol>

			Technologies, International, Vol. 4, No.2, 2016
6	31.03.2023	<p><b>Topic 6. Directed Technological Change</b> Importance of Biased Technological Change. Basics and Definitions. Baseline Model of Directed Technological Change. Directed Technological Change with Knowledge Spillovers. Directed Technological Change without Scale Effects. Endogenous Labor-Augmenting Technological Change.</p>	<p>1. Lecture materials 2. Daron Acemoglu "Modern Economic Growth", Published by Princeton University Press, 41 William Street, Princeton, New Jersey, 2009 3. Aizhan Khoich, Ali Eren Alper, Ahmet Arif Eren "Perspectives On Modern Economy", IJOPEC Publication No: 2020/11, First Edition, September 2020</p>
7	07.04.2023	<p><b>Topic 7. Diffusion of Technology</b> Importance of Technology Adoption and Diffusion. A Benchmark Model of Technology Diffusion. Human Capital and Technology. Technology Diffusion and Endogenous Growth. Appropriate Technology and Productivity Differences. Inappropriate Technologies. Endogenous Technological Change and Appropriate Technology.</p>	<p>1. Lecture materials 2. Aizhan Khoich, Ali Eren Alper, Ahmet Arif Eren "Perspectives On Modern Economy", IJOPEC Publication No: 2020/11, First Edition, September 2020 3. Svetlana Trajkovic: "Modern Economy: FEATURES AND DEVELOPMENTS", Journal of Process Management – New Technologies, International, Vol. 4, No.2, 2016</p>
8	14.04.2023	<p><b>Topic 8. Trade, Technology and Interdependences</b> Trade, Specialization and the World Income Distribution. Trade, Factor Price Equalization and Economic Growth. Trade, Technology Diffusion and the Product Cycle. Learning-by-Doing, Trade and Growth. Trade and Endogenous Technological Change.</p>	<p>1. Lecture materials 2. Daron Acemoglu "Modern Economic Growth", Published by Princeton University Press, 41 William Street, Princeton, New Jersey, 2009 3. Aizhan Khoich, Ali Eren Alper, Ahmet Arif Eren "Perspectives On Modern Economy", IJOPEC Publication No: 2020/11, First Edition, September 2020</p>
9	28.04.2023	<p><b>Topic 9. Economic Development and Economic Growth</b> Structural Change and Economic Growth. Non-Balanced Growth: The Demand Side. Non-Balanced Growth: The Supply Side. Structural Change: Migration. Structural Change: Transformation of Productive Relationships. Towards a Unified Theory of Development and Growth.</p>	<p>1. Lecture materials 2. Daron Acemoglu "Modern Economic Growth", Published by Princeton University Press, 41 William Street, Princeton, New Jersey, 2009 3. Aizhan Khoich, Ali Eren Alper, Ahmet Arif Eren "Perspectives On Modern Economy", IJOPEC Publication No: 2020/11, First Edition, September 2020</p>
10	05.05.2023	<p><b>Topic 10. Modern International Trade</b> Trade concept. The essence of international trade. Import and Export. Balance of payments. International commodity nomenclature. International commodity exchanges. Types of Auctions. Stimulation of Export, Electronic commerce. Forms of electronic commerce.</p>	<p>1. Lecture materials 2. Daron Acemoglu "Modern Economic Growth", Published by Princeton University Press, 41 William Street, Princeton, New Jersey, 2009</p>

		Raw material. Food. World goods market. Free Trade Zones. World Trade Organization.	3. Aizhan Khoich, Ali Eren Alper, Ahmet Arif Eren "Perspectives On Modern Economy", IJOPEC Publication No: 2020/11, First Edition, September 2020
11	12.05.2023	<b>Topic 11. Poverty Traps, Inequality and Financial Markets</b> Multiple Equilibria From Aggregate Demand Externalities. Human Capital Accumulation with Imperfect Capital Markets. Income Inequality and Economic Development. Financial Development and Economic Growth.	1. Lecture materials 4. Svetlana Trajkovic: "Modern Economy: FEATURES AND DEVELOPMENTS", Journal of Process Management – New Technologies, International, Vol. 4, No.2, 2016
12	19.05.2023	<b>Topic 12. Population Growth and the Demographic Transition</b> Patterns of Demographic Changes. Population and Growth: Different Perspectives. Simple Model of Demographic Transition. Institutions and Growth. The Impact of Institutions on Long-Run Development. Modeling Non-Growth Enhancing Institutions.	1. Lecture materials 2. Svetlana Trajkovic: "Modern Economy: FEATURES AND DEVELOPMENTS", Journal of Process Management – New Technologies, International, Vol. 4, No.2, 2016
13	19.05.2023	<b>Topic 13. Modern Labour Market</b> Unemployment: theoretical explanations estimation of the nairu within the framework of the brics countries. The relationship between economic complexity and unemployment rate. Labor market regulations and unemployment. The dynamic effect of globalization on unemployment rates in developing countries.	1. Lecture materials 2. Svetlana Trajkovic: "Modern Economy: FEATURES AND DEVELOPMENTS", Journal of Process Management – New Technologies, International, Vol. 4, No.2, 2016
14	26.05.2023	<b>Topic 14. Exchange Rate Determination</b> Global competition and exchange rate determination. Logistics-trade performance nexus: evidence from a large sample of countries. Estimation of relationship between inflation, foreign exchange rates and oil prices in the world. The future of Monetary Union in the European Union. International outsourcing and the characteristics of modern firms.	1. Lecture materials 2. Daron Acemoglu "Modern Economic Growth", Published by Princeton University Press, 41 William Street, Princeton, New Jersey, 2009 3. Aizhan Khoich, Ali Eren Alper, Ahmet Arif Eren "Perspectives On Modern Economy", IJOPEC Publication No: 2020/11, First Edition, September 2020
15	26.05.2023	<b>Topic 15. Structural Transformations and Market Failures in Development</b> Financial Development. Fertility, Mortality, and the Demographic Transition. Migration, Urbanization, and the Dual Economy. Distance to the Frontier and Changes in the Organization of Production. Multiple Equilibria from Aggregate Demand Externalities and the Big Push. Inequality, Credit Market Imperfections, and Human Capital. Toward a Unified Theory of Development and Growth.	1. Lecture materials 2. Daron Acemoglu "Modern Economic Growth", Published by Princeton University Press, 41 William Street, Princeton, New Jersey, 2009 3. Aizhan Khoich, Ali Eren Alper, Ahmet Arif Eren "Perspectives On Modern Economy", IJOPEC Publication No: 2020/11, First Edition, September 2020

**Seminars. Total-30 hours**

1	22.02.2023	Topic 1. Introduction to the subject	2 h.
2	01.03.2023	Topic 2. Fundamental Determinants of Differences in Economic Performance	2 h.
3	15.03.2023	Topic 3. Dynamic Programming and Optimal Growth	2 h.
4	29.03.2023	Topic 4. Human Capital and Economic Growth	2 h.
5	05.04.2023	Topic 5. Models of Competitive Innovations	2 h.
6	12.04.2023	Topic 6. Directed Technological Change	2 h.
7	19.04.2023	Topic 7. Diffusion of Technology	2 h.
8	26.04.2023	Topic 8. Trade, Technology and Interdependences	2 h.
9	03.05.2023	Topic 9. Economic Development and Economic Growth	2 h.
10	03.05.2023	Topic 10. Modern International trade	2 h.
11	10.05.2023	Topic 11. Poverty Traps, Inequality and Financial Markets	2 h.
12	17.05.2023	Topic 12. Population Growth and the Demographic Transition	2 h.
13	24.05.2023	Topic 13. Modern Labour Market	2 h.
14	31.05.2023	Topic 14. Exchange Rate Determination	2 h.
15	31.05.2023	Topic 15. Structural Transformations and Market Failures in Development	2 h.

**Lecturer:****E. N. Nasirov**