**SYLLABUS**

**Fall semester 2021-2022 academic year year**

**on the educational program "** Financial market and financial engineering **"**

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| **Discipline Code** | **Discipline name** | **Self doctorate student work (SDSW)** | **Number of hours** | | | | | **Number of credits** | **Self doctorate student work (SDSW)** |
| **Lectures (L)** | **Practice. lessons (P)** | | **Lab. lessons (L)** | |
| **FMFI 7302** | Financial market and financial engineering |  | 2 | 1 | |  | | 3 | 7 |
| **Academic Course Information** | | | | | | | | | |
| **Type of training** | **Type / nature of the course** | **Types of lectures** | | | **Types of practice sessions** | | **Number of SDSW** | | **Final control form** |
| Online /  combined | Profiling / Theoretical | problematic,  informational,  binary,  lecture-conference,  final lecture | | | Writing scientific papers, conducting research, solving problems,  situational tasks | | At least three | | Test in SDS Moodle / |
| **Lecturer** | Adambekova A.A, d.e.s. professor | | | | | |  | | |
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| **Academic presentation of the course** |

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| **The purpose of the discipline** | **Expected learning outcomes (LO)**  **As a result of studying the discipline, the student will be able to:** | **Indicators of achievement LO (IA)**  **(for each LO at least 2 indicators)** |
| to form the ability of doctoral students to form financial policy and financial engineering, especially the use of financial instruments, practical skills in the use of financial instruments, skills in analyzing financial markets | Apply knowledge of financial engineering, systems for collecting and analyzing financial information, using financial instruments, preparing financial strategies for companies and organizations; | ID 1.1 Uses a system of knowledge about financial engineering concepts and ideas about financial strategy;  ID 1.2 Explain and apply financial instruments  ID 1.3 Performs grouping  knowledge, information and research results for the formation of financial policy;  ID 1.4 Applies methods and tools of financial engineering in practice |
| Solve the problems of the financial market and financial engineering on the example of specific situations with the aim of their subsequent application in practice | ID 2.1 Discloses the procedure for using financial instruments and mechanisms  ID 2.2 Determines the ways of financial planning and obtaining financial results,  ID 2.3 Discloses information on financial engineering |
| Interpret the information and results reflected in the financial and analytical reports | 3.1 Explain the methodology for using financial engineering  D 3.2 Defines objects of financial engineering  ID 3.3 Determines the indicators for financial analysis and engineering.  ID 3.4 Identifies the problems of financial engineering and how to justify them  ID 3.5 Generates reports and analytical opinion on financial engineering |
| Collect and interpret financial information sources to classify and identify financial engineering tools | ID 4.1 Explain the financial engineering methodology  ID 4.2 Identifies and classifies sources of financial information  ID 4.3 Calculates and reflects the analysis of financial results.  ID 4.4 Calculates and justifies research results;  ID 4.5 Calculates formulas and models for financial engineering |
| Compile and present an analysis of financial performance | D 5.1 Explain and apply the technique and methodology of financial engineering  ID 5.2 Explains the content and purpose of the financial engineering policy formation;  ID 5.3 Reflect changes in the results of financial engineering;  ID 5.4 Calculate formulas and models in the field of financial engineering  ID 5.5 Reflects the results of financial engineering  ID 5.6 Corrects the results of financial engineering. |
| **Prerequisites** | **Academic writing, scientific writing** | |
| **Post-requisites** | Islamic Finance | |
| **Literature and Resources** | **Literature:**  1. The Law of the Republic of Kazakhstan “On the Securities Market”  2. Pierre Vernimmen, Yann Le Fur, Maurizio Dallochio, Antonio Salvi Pascal Quiry. Financing. - Weley - 2017  6. Bank of International Settlements, 2019: BIS Quarterly Review - International Banking and financial market developments, March 2019  **Internet resources:**  1. World Bank. Global Economic Prospects, June 2020 / https://openknowledge.worldbank.org/handle/10986/33748  2. Open knowledge repository of World Bank. Policy Research Working Papers, 2020 / https://openknowledge.worldbank.org/handle/10986/9 | |

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| **Academic policy of the course in the context of university moral and ethical values** | **Rules of academic conduct:**  **All students must register for the MOOC. The deadlines for completing the online course modules must be strictly observed in accordance with the schedule for studying the discipline.**  **ATTENTION! Failure to meet deadlines leads to loss of points! The deadline for each assignment is indicated in the calendar (schedule) for the implementation of the content of the training course.**  **Academic values:**  **- Practical / laboratory studies, CDS should be independent, creative.**  **- Plagiarism, forgery, use of cheat sheets, cheating at all stages of control are inadmissible.**  **- Students with disabilities can receive consulting assistance by e-mail** [nurgazina\_asel@mail.](mailto:nurgazina_asel@mail.)ru. |
| **Assessment and attestation policy** | **Criteria assessment: assessment of learning outcomes in relation to descriptors (checking the formation of competencies at Midterm control and exams).**  **Summative assessment: assessment of the activity of work in the audience (at the webinar); assessment of the completed assignment.**  **The final grade for the discipline is calculated using the following formula:** , |

**Calendar (schedule) for the implementation of the content of the training course**

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| --- | --- | --- | --- | --- | --- | --- | --- |
| Week | Topic name | LO | IA | Number of hours | Maximum score | Knowledge Assessment Form | Lesson form  /platform |
| **Module I Financial market in the context of scientific theories** | | | | | | |  |
| 1 | **L 1. Financial market theory in the system of economic sciences** | LO 1 | IA 1.1.  IA 1.2 | 1 | 2 |  | Lecture in Zoom |
| 1 | **S** Discussion of scenarios for the development of the financial market in economic science: directive, fundamental, liberal, eclectic | LO 1 | IA 1.1.  IA 1.2.  IA 1.3.  IA 1.4. | 1 | 12 | Development of critical thinking and analysis | Webinar  in Zoom |
| 2 | **L 2. Neo-finance: implementation of the concept of market structuring and its instruments** | LO 1 | IA 1.1  IA 1.2 | 2 | 2 |  | Lecture in Zoom |
| 2 | **S.** Perception of the concept of structuring the financial market is the basis for the demonstration of neo-finance | LO 2 | IA 1.1.  IA 1.2.  IA 1.3.  IA 1.4. | 1 | 12 | Development of critical thinking and analysis | Webinar  in Zoom |
| 3 | **L 3. Main characteristics and determinants of the development of the national financial market** | LO 3 | IA 1.1.  IA 1.2. | 2 | 2 |  | Lecture in Zoom |
| 3 | S Assess the impact of the cyclical nature of the economy on its development. Macroeconomic factors in the development of the financial market |  | IA 1.1.  IA 1.2.  IA 1.3.  IA 1.4. | 1 | 12 | Development of critical thinking and analysis | Webinar  in Zoom |
| 4 | **L 4. Financial market development models in the modern world economy** | LO 4 | IA 1.1  IA 1.2 | 2 | 2 |  | Lecture in Zoom |
| 4 | **S** Case Study: to reveal the features of the demonstration of behavioral finance and their role in the formation of models for the development of the financial market |  | IA 1.1.  IA 1.2.  IA 1.3.  IA 1.4. | 1 | 12 | Development of critical thinking and analysis | Webinar  in Zoom |
| 5 | **L 5. Financial services as the basis of financial engineering** |  | IA 1.1  IA 1.2 | 2 | 2 |  | Lecture in Meet |
| 5 | **S** Financial services in the prism of the scientific theories of K. Marx and R. Hilferding - scientific discussion |  | IA 1.1.  IA 1.2.  IA 1.3.  IA 1.4. | 1 | 12 | Development of critical thinking and analysis | Webinar  in Zoom |
| 5 | **SDSWT Consultation on implementation SDSW 1** |  |  |  |  |  | Webinar  in Zoom |
| 5 | **SDSW 1**  **Writing a scientific paper on the topic of PhD student research in the context of the studied topics of the module 1** |  |  |  | 30 | **Scientific paper** | Webinar  in Zoom |
| 5 | **Midterm1** |  |  |  | 100 |  |  |
|  | **Module II Structured financial instruments and Interaction of sectors of the financial market** | | | | | | |
| 6 | **L 6. Financial Instruments: essence, evolution and modern meaning** |  | IA 1.1  IA 1.2 | 2 | 2 |  | Lecture in Zoom |
| 6 | **S** case study: characteristics of financial instruments |  | IA 1.1.  IA 1.2.  IA 1.3.  IA 1.4. | 1 | 12 | Development of critical thinking and analysis | Webinar  in Zoom |
| 7 | **L 7.** **Hybrid (structured) financial instruments** |  | IA 1.1  IA 1.2 | 2 | 2 |  | Lecture in Zoom |
| 7 | **S** Desmo-instruments and their role in the development of the national financial market |  | IA 1.1.  IA 1.2.  IA 1.3.  IA 1.4. | 1 | 12 | Development of critical thinking and analysis | Webinar  in Zoom |
| 8 | **L 8.** **Vertical forms of interaction and their demonstration in the financial market** | LO 4 | IA 2.1 | 2 | 2 |  | Lecture in Zoom |
| 8 | **S** Financial ecosystems: features and prospects of formation | LO 4 | IA 2.2  IA 2.3  IA 3.3 | 1 | 12 | Development of critical thinking and analysis | Webinar  in Zoom |
| 9 | **L 9.** **Interaction of segments of the financial market** | LO 4 | IA 2.1 | 2 | 2 |  | Lecture in Meet |
| 9 | **S** Corporate interaction in the financial market system | LO 4 | IA 2.2  IA 2.3 | 1 | 12 | Development of critical thinking and analysis | Webinar  in Meet |
| 9 | **SDSWT** 4 **Consultation on implementation** **SDSW** 2 |  |  |  |  |  | Webinar  in Meet |
| 10 | **L 10.** **Interaction of financial market sectors in the format of resource segmentation** | LO 4 | IA 2.1 | 2 | 2 |  | Lecture in Meet |
| 10 | **S** Interaction of financial market sectors within a segmentation group: resource servicing, resource generating and resource allocating | LO 4 | IA 2.2  IA 2.3 | 1 | 12 | Development of critical thinking and analysis | Webinar  in Meet |
| 10 | **SDSW 2**  **Writing a scientific paper on the topic of PhD student research in the context of the studied topics of module 2** |  |  |  | 30 |  | Webinar  in Meet |
| 10 | **МТ 2** |  |  |  | 100 |  |  |
|  | **Module III Financial engineering and government regulation** | | | | | | |
| 11 | **L 11. Main products of financial engineering (taking into account the interests of investors)** |  | IA 3.1 | 2 | 2 |  | Lecture in Meet |
| 11 | **S** assessment of financial indicators and risks |  | IA 3.2  IA 3.3  IA 3.4 | 1 | 12 | Development of critical thinking and analysis | Webinar  in Meet |
| 12 | L 12. **Construction of financial products in the debt market and securitization** | LO 4 |  | 2 | 2 |  | Lecture in Meet |
| 12 | **S** Features of financial engineering methodology | LO 4 | IA 4.1  IA 4.2 | 1 | 12 | Development of critical thinking and analysis | Webinar  in Meet |
| 13 | L 13. **Financial engineering in the equity securities market** | LO 4 | IA 4.1  IA 4.2 | 2 | 2 |  | Lecture in Meet |
| 13 | **S** Hybrid securities  equity instruments as pooled investment vehicles | LO 4 | IA 4.1  IA 4.2 | 1 | 12 | Development of critical thinking and analysis | Webinar  in Meet |
| 14 | **L.**  **The state in the system of financial market relations** | LO 4 | IA 4.1  IA 4.2 | 2 | 2 |  | Lecture in Meet |
| 14 | S. to reveal the role and significance of the state in the financial market in the aspect of the Keynesian, neo-Keynesian and Austrian schools | LO 4 | IA 4.1  IA 4.2 | 1 | 12 | Development of critical thinking and analysis | Webinar  in Meet |
| 15 | L. **Financial engineering in international markets** | LO 5 | IA 5.1 | 2 | 2 |  | Lecture in Meet |
| 15 | S. Case study. Analysis of international markets | LO 5 | IA 5.2 | 1 | 12 | Development of critical thinking and analysis | Webinar  in Meet |
| 15 | **SDSWT 7 Consultation on the implementation of SDSW 3** |  |  |  |  |  | Webinar  in Meet |
| 15 | **SDSW 3 Writing a scientific paper on the topic of doctoral student research in the context of the studied topics of module 3** | LO 5 | IA 5.5  IA 5.6 |  | 30 | Development of critical thinking and analysis | Webinar  in Meet |
|  | **LC 2** |  |  |  | 100 |  |  |

[Abbreviations: ВС - questions for self-examination; TK - typical tasks; IZ - individual tasks; KR - control work; RK - midterm control.

Note:

- Form of conducting L and S: webinar in MS Teams / Zoom (presentation of materials for 10-15 minutes, then its discussion / consolidation in the next discussion / problem solving / ...)

- The form of the CD: webinar (at the end, students hand over screenshots of the work to the headman, the headman sends them to the teacher) / test in the Moodle LMS.

- All course materials (L, VS, TK, IZ, etc.) see the link (see Literature and resources, p. 6).

- After each deadline, tasks of the next week open.

- Tasks for CD are given by the teacher at the beginning of the webinar.]

Dean Bimendieva L.A

Chairman of the Methodology Bureau

Head of the department Nurmagambetova A.

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