Summary work program of the discipline

*"Simulation of Banking"*

Direction of preparation

38.03.01 Economy

Profile: " Finance and Credit "

The working program of discipline meets

GEF 3+ toward 38.03.01 Economy

Discipline B1.V.DV.05.03 "Modeling Banking" refers to the professional discipline of choice in a foreign language.

**The purpose of discipline**

The purpose of discipline "Simulation of Banking" is a theoretical and practical training of students in the development and use of mathematical models for risk assessment, analysis, optimization and forecasting of financial and economic activity of commercial banks.

**Problems of the discipline:**

- The study of models and simulation methods of banking activities to risk;

 - The solution of optimization problems in order to increase the efficiency of banking activities;

- The acquisition of practical skills for risk assessment, analysis and optimization of the financial and economic activities of the bank with the use of modern computer technologies;

 - Forecasting the results of financial and economic activity of the bank.

**Requirements for the results of the development content of the discipline:**

**GC-3** - the ability to use the basics of economic knowledge in the various fields of activity;

**GPC-2** - the ability to collect, analyze and process data needed to solve professional problems;

**GPC-3** - the ability to choose the tools for processing of economic data in accordance with the task to analyze the results of the calculations and justify the findings;  
**PC - 1** - the ability to collect and analyze the raw data needed to calculate the economic and socio-economic indicators characterizing the activity of economic entities;

**PC-2** - ability based on standard operating procedures and regulatory framework to calculate the economic and socio-economic indicators characterizing the activity of economic entities;

**PC-3** - the ability to carry out the necessary preparation for the economic sections calculations plans, justify them, and to present the results of the work in accordance with accepted standards in the organization;

**PC - 4** - ability based on the description of economic processes and phenomena to build a standard theoretical and econometric models to analyze and interpret meaningful results;

**PC-5** - the ability to analyze and interpret financial, accounting and other information contained in the reports of enterprises of different ownership forms, organizations, departments, etc. and use the information to make management decisions;

**PC - 6** - the ability to analyze and interpret the data of domestic and foreign statistics on socio-economic processes and phenomena, to identify trends in the socio-economic indicators;  
**PC - 7** - the ability to analyze and interpret the data of domestic and foreign statistics on socio-economic processes and phenomena, to identify trends in the socio-economic indicators.

**The content of the discipline.**

Topic 1. Introduction. Banking in the financial services industry.

Theme 2. The theory of banking and financial management.

Theme 3. Bank estimates, analysis of the effectiveness and cost. Strategic planning.

Theme 4. Asset and Liability Management.

5. Subject portfolio risk management and sale of banking products and services.

Topic 6. Basic aspects of modeling and financial and economic activities of a commercial bank.

Theme 7. Types of optimization models and methods Bank solving optimization problems.

Theme 8. Production and organizational model of the bank.

Subject 9. Dynamic Banking model management.

The amount of discipline "Simulation of Banking" - 108 hours, including 56 hours of class work.

Semester - eighth.

The shape of the intermediate control offset.

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