

**Academic discipline:  
«Financial mathematics»**

<b>Code and name of specialty</b>	6-05-0311-05 Economic informatics
<b>Training course</b>	1
<b>Semester of training</b>	1
<b>Number of class hours</b>	52
<b>Lectures</b>	26
<b>Seminar classes</b>	-
<b>Practical classes</b>	26
<b>Laboratory classes</b>	-
<b>The form of intermediate certification (credit/differential credit/exam)</b>	exam
<b>Number of credits</b>	4
<b>Competencies to be formed</b>	Mastering the academic discipline «Financial mathematics» should ensure the formation of specialized competencies: to use financial and mathematical methods to solve problems of professional activity; to use basic mathematical concepts and calculation methods for the analysis and modeling of economic processes.

**Brief content of the academic discipline:**

In the process of teaching the discipline «Financial mathematics»:

- the basic concepts that are used in financial calculations are considered: simple and compound interest, interest rate system, interest accrual, discounting payments, constant payment flows, variable and continuous rents, financial instruments.
- the problems related to the quantitative analysis of various payment flows, in particular financial rents, are being studied.
- students are mastering quantitative financial analysis, which will allow them to solve a wide range of tasks: from elementary interest accrual to the analysis of complex investment, credit and commercial problems in their various formulations, depending on specific conditions.