



Entitlement

Mathematics of Finance, 5 ECTS

Prerequisites

B1 level of English language

Main aim

To provide theoretical knowledge and practical skills necessary for modelling and application of mathematical methods for financial tasks, which are necessary for successful business enterprise financial and investment activities, developing the environmental impact on economic entity activity, analysis, evaluation and effective environmental adaptation skills.

Summary

Financial instruments applied in economic activity are analyzed, their application is taught and their application and modelling capabilities are considered. Opportunities of theoretical knowledge application in practice are demonstrated. Economic life models are analyzed.

Learning Outcomes

1.	Make business decisions evaluating their impact on society, economic and cultural development, welfare and environment.
2.	Cooperate and work in a team, take responsibility for one 's and colleagues' work.
3.	Discuss on subject topic, prepare and make reports
4.	Know the basic economic concepts, principles, theories and apply them to modelling business decisions.
5.	Model and evaluate the decisions on the entity's economic, financial and investment activities.
6.	Formulate the conclusions of business decisions, find, and justifies entity's problems solutions.

Syllabus

1.	Percent. Simple and compound interest. Equivalent rate.
2.	Cash flows.
3.	Loan repayment methods.
4.	Cumulative funds.
5.	Investment evaluation methods.
6.	Capitalization. Depreciation
7.	Securities (bills and bonds).

Evaluation procedure of knowledge and abilities

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$$FE = 0,4 \cdot X1 + 0,4 \cdot X2 + 0,2 \cdot X3, \text{ as}$$

FE – final evaluation;

X1 – control work;

X2 – control work

X3 – Exam