

FINANCIAL MATHEMATICS 2 (ECTS 2)

GENERAL AND SPECIFIC GOALS OF THE COURSE The main goal of the course is to learn different systems of financial intermediation, intermediation elements and mathematical techniques that are used in market valuation of debtors' financial instruments and selected types of derivatives. Besides developing quantitative approach to business and financial problems, this course enables students to recognize structure in a financial system, classification of financial instruments from the perspective of their role in financial intermediation and from the perspective of different combination of their economic and mathematical characteristics, to differ contract and market elements in valuation of financial instruments and to learn market valuation of debtors' financial instruments in detail. Course also teaches techniques of valuation of future yields of basic securities' portfolios. Last part of the course give a short overview of functioning and market valuation of certain types of derivatives.

General course goals **Specific course goals** 1 Students will gain solid knowledge in financial mathematics

Obtaining basic theoretical knowledge related to financial intermediation through transferable financial instruments as a basis for understanding contemporary finance and possible financial challenges that acquire rational decision making.

2. Students will develop skills in critical and analytical thinking

Students will, through concrete numerical problems develop basis for analytical approach in investing in financial instruments within the framework of mathematical tools and theories done in the course