**Professional Undergraduate Study - Finance and Business Law
Syllabus**

Financial Mathematics

This syllabus informs students about the content of the course "Financial Mathematics," the teaching methodology, student obligations, and the exam format.

1. Basic Course Information
Course Objectives

Students are expected to develop:

a) General Competencies

Develop the ability to adopt mathematical methods and calculations in the field of economic mathematics.

Apply acquired knowledge in the field of economics with an emphasis on financial operations.

b) Specific Competencies

Mathematically model phenomena in economic practice.

Explain the motivation behind the selection of a particular mathematical model.

Interpret the obtained mathematical results using economic terminology.

2. Learning Outcomes

Learning outcomes represent the knowledge, skills, and competencies acquired by the student upon fulfilling the course requirements and passing the exam in Financial Mathematics. After completing the course, students will be able to:

I1 Apply the rules for calculating the terms and sum of an arithmetic sequence through simple interest calculation.

I2 Apply the rules for calculating the terms and sum of a geometric sequence through compound interest calculation.

I3 Use compound interest calculation in various economic applications.

I4 Calculate the repayment schedule for different types of loans.

I5 Apply the calculation of the zero of a polynomial in economic examples.

I6 Apply differential calculus in economic examples.

3. Duration and Delivery Method

The course Financial Mathematics is a mandatory subject and carries 6 ECTS credits. Classes are conducted as a combination of lectures and exercises. The schedule follows the timetable published in the digital student information system and on the school's notice board. The course consists of a total of 60 hours, of which 30 hours are lectures and 30 hours are exercises.

4. Instructors and Communication Methods

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5. Literature and Other Sources

Required Literature
Šego, Boško: *Financijska matematika*, Zagreb, 2008.

Supplementary Literature
Relić, B.: *Gospodarska matematika*, Hrvatska zajednica računovođa i financijskih djelatnika, Zagreb, 1996.
Relić, B.: *Financijske tablice*, Hrvatska zajednica računovođa i financijskih djelatnika, Zagreb, 2002.
Babić, Z.; Tomić Plazibat, N.: *Poslovna matematika*, Veleučilište u Splitu, Split, 2000.

6. Code of Conduct

In addition to general rules of proper behavior, students are expected to:

- Actively and attentively follow the lessons
- Arrive to class on time, prepared, and with the necessary materials

During written exams:

- Students may only have writing materials and an identification document with them. No other personal belongings are allowed, especially mobile phones.
- Leaving the room is not permitted.
- Communication with other students in any form is not allowed.

Students and lecturers are also expected to adhere to ethical principles, which require compliance with the following instructions:
In order to maintain a high standard of quality and the school's reputation, we would like to emphasize the school's official position on misconduct during exams.

The use of unauthorized materials (cheat sheets) during exams, as well as any form of communication between students, is prohibited and ethically unacceptable. Lecturers are expected to sanction such behavior. To prevent this, students must be reminded before each exam that cheating will not be tolerated. Measures should be taken to prevent cheating, such as instructing students to leave their personal belongings in designated areas (coat racks), spreading students apart, etc. During exams, the use of mobile phones is strictly prohibited, even for calculations! Students must identify themselves with their student ID card during the exam.

If students engage in unacceptable behavior, the materials they used for cheating must be confiscated, the exam must be taken away and annulled, and the student's name and surname recorded.

Lecturers are expected to ensure that exam grades reflect the students' actual knowledge, not their cleverness, as their competencies will ultimately be assessed by the job market, which is crucial for maintaining the school's reputation.

7. Activity Calendar

Classes
Classes are held according to the academic year activity calendar, which is published on the School's website, in the digital student service system, and on the notice board.

Deadlines and Submission of Seminar and Other Papers
Seminar papers and other assignments are to be submitted during the class of the subject lecturer or course leader, or during consultation hours.

8. Tips and Recommendations for Students

As an additional form of support for mastering the material, students are advised to attend consultations at times that will be specified later.

We especially want to emphasize the necessity of continuous independent work, as this will allow you to meet the relatively high exam criteria by taking full advantage of this teaching concept. The material is such that failure to keep up with the ongoing content can seriously hinder a student's ability to follow the further course of instruction. Difficulties in following the material may lead to demotivation and, ultimately, various undesirable outcomes. Therefore, we suggest a serious approach from the very beginning and throughout the entire course.

In case of any uncertainties, problems, or unforeseen situations, we recommend contacting the lecturer and course leader in a timely manner.