

DESCRIPTION OF THE COURSE

GENERAL INFORMATION		
Course Holder	dr.sc. Bojan Tomić	
The name of the college	Financial instruments and risk insurance instruments	
Study program	Professional Graduate Study - Business Management - MBA	
Status of the College	Mandatory	
Year	2 nd Year	
Point value and method of teaching	ECTS coefficient of student workload	6
	Number of hours (P+V)	28+28

DESCRIPTION OF THE COURSE
1.1. <i>Objectives of the course</i> The aim of this course is to understand different types of financial instruments, their derivatives and characteristics of derivative assets. Students are introduced to the basic theories of the functioning of financial markets and are taught the skills and techniques that are applied to them. As part of the course, strategies based on individual financial derivatives will be discussed, which enable the insurance of certain risks and their control, as well as the possibility of capital earnings. Students are expected to develop: (a) General competencies - Identify the types of risks in the field of investment activities - distinguish between types of financial instruments of money and capital - understand funding opportunities through financial market activities

(a) Specific competencies.

- to value the intrinsic value of money market financial instruments, capital markets and their derivatives;
- valorize the market value of financial instruments with the aim of examining investment opportunities
- make investment decisions based on the acquired knowledge and techniques in the field of valuation of financial instruments;
- carry out portfolio hedging activities using derivative financial instruments

1.2. *Requirements for enrolment in the course*

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1.3. *Expected learning outcomes for the course*

Students should be able to:

- I1 Identify types of risks and differences between risk and uncertainty
- I2 Interpret balance sheet financial instruments and ways of functioning in domestic and international frameworks
- I3 Valorise risk quantification
- I4 Calculate the value of derivative financial instruments
- I5 Apply derivative financial instruments
- I6 Calculate the amount of financial instruments with the aim of hedging the portfolio

1.4. *Course content*

Introduction to Risks

1. Risk as an economic phenomenon
2. Participants in the Economy and Risks

Money market instruments

1. Valuation of money market instruments

Capital market instruments - Valuation of capital market instruments - debt instruments - Valuation of capital market instruments - debt instruments. New forms of financing - cryptocurrencies as digital assets. - Valuation of capital market instruments - equity instruments Risk measurement and quantification - Value at risk (VaR) Investment funds - Funds and types of funds. Net Asset Value (NIV) Introduction to derivatives - Forward and Futures Contracts - Hedging - Substitutions - hedging, hedging and underlying futures risk - The emergence and disappearance of off-balance-sheet instruments, the role of the clearing house in derivatives Options - valuation of options - Binomial model of option valuation - Black-Scholes model of option valuation		
1.5. <i>Types of teaching (put X)</i>	☒ lectures ☐ seminars and workshops ☒ exercises ☐ Distance education ☐ Field Teaching	☐ Independent tasks ☐ Multimedia & Network ☐ laboratory ☐ Mentoring work ☐ Other _____

1.6. Student obligations

The obligations of students are prescribed in detail by the Statute, Study Regulations, and Student Obligations Guidelines. The key obligations of students are:

ATTENDANCE: students are obliged to attend classes, actively follow lectures and exercises, and participate constructively in classes, and in order to acquire the right to take the exam, it is necessary to attend classes in the percentages prescribed by the Study Regulations. For each student, their presence in class is recorded through the Infoeduka digital office system. The minimum obligations are;

- Full-time students must attend at least 70% of the total number of classes to be eligible to sign.
- Part-time students need to attend at least 50% of the total number of classes to be eligible to sign.

PASSING EXAMS: in order to achieve a positive grade in the subject, it is necessary to achieve at least 54 points in the subject, but also at least 50% of points for each learning outcome. The method of taking the exam is described in more detail in the item Assessment and evaluation of students' work during classes and at the final exam.

**FINAL EXAM – a student who has not met the conditions for passing the exam during the continuous examination of knowledge (has achieved a total of at least 54 points in the course and has met the lower point threshold of adoption of each learning outcome, i.e. a minimum of 50% of the points of each learning outcome), may take the learning outcomes of the course at the final exam.*

**CONTINUOUS EXAMINATION: In order to make students progress more efficiently in class, continuous examinations of knowledge (2 intermediate exams) are carried out. In this way, students acquire smaller teaching units and master the subject material more easily.*

1.7. Student Work Tracking (Add X to the appropriate tracking format)

Attending classes	x	Teaching activity		Seminar paper		Experimental work	
Written exam	x	Oral exam		Essay		Research	
Project		Continuous Knowledge Assessment		Report		Practical work	
Portfolio							

1.8. Assessment and evaluation of students' work during classes and at the final exam

Evaluation and evaluation of students' work during classes and at the final exam is carried out on the basis of the Regulations on Studying of the EFFECTUS University of Applied Sciences. The linking of learning outcomes, teaching methods and assessment of learning outcomes is carried out as follows:

	Attending classes	Written exam	Project	Seminar paper	Practical work	Altogether
I1		16				
I2		16				
I3		16				
I4		16				
I5		16				
I6		16				
OUT OF OUTCOME	4					
ALTOGETHER	4	96				100

FORMS OF TRACKING	NAME OF LEARNING OUTCOMES	TEACHING METHOD	KNOWLEDGE ASSESSMENT METHOD	Maximum number of points
Written exam	OUTCOME 1 Recognize the types of risks and the differences between risk and uncertainty	Lectures and exercises	Exam in the form of an essay on a given topic: essay-type questions for the interpretation of business and investment situations with the aim of identifying risks Multiple Choice Questions: Multiple Choice (MCQ) tests understanding of basic concepts in financial markets	16
Written exam	OUTCOME 2 Interpret balance sheet financial instruments and ways of functioning in domestic and international frameworks	Lectures and exercises	Exam in the form of an essay on a given topic: essay-type questions for evaluating instruments with the aim of classifying them Multiple Choice Questions: Multiple Choice (MCQ) tests understanding of basic concepts in financial markets	16
Written exam	OUTCOME 3 Valorise risk quantification	Lectures and exercises	Essay exam on a given topic: essay-type questions and tasks for quantifying the risk of yield distribution of financial instruments	16

			<i>Multiple Choice Questions: Multiple Choice (MCQ) tests understanding of basic concepts in financial markets</i>	
Written exam	OUTCOME 4 <i>Calculate the value of derivative financial instruments</i>	Lectures and exercises	<i>Exam in the form of an essay on a given topic: essay-type questions and tasks for calculating the value of derivative financial instruments</i> <i>Multiple Choice Questions: Multiple Choice (MCQ) tests understanding of basic concepts in financial markets</i>	16
Written exam	OUTCOME 5 <i>Apply derivative financial instruments</i>	Lectures and exercises	<i>Exam in the form of an essay on a given topic: essay-type questions that test the knowledge of the possibility of hedging against market risk through the use of derivatives</i> <i>Multiple Choice Questions: Multiple Choice (MCQ) tests understanding of basic concepts in financial markets</i>	16
Written exam	OUTCOME 6 <i>Calculate the amount of financial instruments with the</i>	Lectures and exercises	<i>Exam in the form of an essay on a given topic: essay-type questions of portfolio protection analysis using</i>	16

	<i>aim of hedging the portfolio</i>		<i>derivative instruments</i> <i>Multiple Choice Questions: Multiple Choice (MCQ) tests your understanding of basic concepts in financial securities markets</i>	
<i>Attending classes</i>	<i>All outcomes</i>	<i>Lectures and exercises</i>	<i>Attendance records</i>	<i>4</i>
			TOTAL POINTS	100

Types of Student Workload	Student Load Hours	ECTS credits
Attending contact classes	45	1,5
Field Trips/Visits Outside the College	0	0
Independent study/research	60	2,0
Out-of-classroom preparation and preparation of seminars/presentations	0	0
Work on an out-of-classroom project assignment	0	0
Independent preparation for exams and exam time	75	2,5
Consultation activities	0	0
Other	0	0
TOTAL ECTS credits	180	6

RATING:

In order to achieve a positive grade in the course, the student must cumulatively meet two conditions: achieve a total of at least 54 (fifty-four) points in the course and meet the lower point threshold for the adoption of each individual learning outcome, which is 50% of the total points of the learning outcomes.

Grades are calculated based on the following distribution of points:

SCORE	RATING
0,00 – 53,90	Insufficient (1)
54,00 – 64,90	Sufficient (2)
65,00 – 79,90	Good (3)
80,00 – 89,90	Very good (4)
90.00 and more	Excellent (5)

Grading is carried out in a transparent manner by collecting points. The course is evaluated with 100.00 points (with the possibility of achieving an additional 8 points on the Challenge learning outcome).

CHALLENGE LEARNING OUTCOME - the student has the opportunity to earn an additional maximum of 8 points through the Challenge learning outcome; The student independently chooses one of the activities proposed in the first lesson, and has the opportunity to independently propose an activity with which he wants to increase the number of points and, with the consent of the course holder, achieves them according to the criteria of the course. Points for the Challenge learning outcome are not distributed according to the learning outcomes, but the number achieved makes an additional number of points to the total number of points achieved according to the learning outcomes.

Before taking the final written exam, each student must meet the prescribed conditions, which primarily means that they have attended the % of classes determined by the Study Regulations and that they have received an electronically encrypted permission to take the exam.

1.9. Required reading and number of copies in relation to the number of students currently attending classes in the course

Title	Number of copies	Number of students
1. Tomić, Bojan: (2016) <i>Financial Instruments and Derivatives</i> , EFFECTUS Study of Finance and Law - University College, Zagreb	5* *students receive compulsory literature in permanent ownership	60
2. Teaching materials (lectures and exercises)		

1.10. Supplementary literature

Andrijanić, I., Vidaković, N. (2016) *Operations on Stock Exchanges*, Effectus, Zagreb

Bodie, Z., Kane, A., Marcus, A. (2006) *Investments Started, Mate*, Zagreb

Marković, I. (2000) *Financing*, RRiF, Zagreb

Mishkin, Frederic S., G. Eakins S. (2005) *Financial Markets + Institutions*, Mate, Zagreb

Madir, J. (2009) *Capital Markets*, Mate, Zagreb

Various articles, publications and reports available from websites (<https://globalderivatives.nyx.com/en/nyse-liffe>, <http://www.cmegroup.com>, www.nyse.com, www.nasdaq.com, www.zse.hr)

1.11. Ways of quality monitoring that ensure the acquisition of output knowledge, skills and competencies

- analysis of exam results, achieved results, level of understanding and knowledge during exercises, practical tasks and group work,
- conducting a survey among students,
- The evaluation of the teacher,
- achieved results and level of knowledge presented during the preparation and defense of the final thesis (students who choose a graduate thesis in this course),
- analysis of the Quality Centre's reports and
- Feedback from students who have already graduated and their employers on the usefulness of the content of this course in the performance of the work they do.