

DESCRIPTION OF THE COLLEGE

GENERAL INFORMATION		
Course Holder	Prof. Dr. Sc. Robert Kopal	
Name of the College	Analytical Management 2: Problem Solving and Decision Making Techniques	
Study program	Professional Graduate Study of Business Management - MBA	
Status of the College	Mandatory	
Code	MBA-AM2-19	
Year	Year 2	
Point value and method of teaching	ECTS Student Workload Coefficient	6
	Number of hours (P+H+S)	28+28+14

DESCRIPTION OF THE COLLEGE
1.1. <i>Objectives of the course</i> Students are expected to develop: a) general competencies: • Adapt to changes and the demands of the work environment • collaborate effectively in project teams • apply the acquired knowledge and give their (analytical) contribution to solving complex problems and business decision-making. (A) Specific competencies. • identify key concepts important for analysis and analytical management and their application in the business environment • identify and master restrictive mindsets in the form of cognitive limitations and instinctive mental traits when solving complex business problems and decision-making. • Test the advantages and disadvantages of using business analytical techniques in problem solving and business decision-making • solve complex business problems by applying problem-solving techniques and decision-making techniques in business decision-making.

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:

1. Critically assess the reasons for the introduction of analytical management in solving complex business challenges.
2. Recommend ways to solve complex business problems using hypothesis generation and testing techniques.
3. To argue an opinion in the practical solution of complex problems by challenging techniques.
4. To argue an opinion in practical problem solving by decomposition and visualization.
5. Critically judge the practical application of a particular method of cause and effect assessment.
6. Critically assess the practical application of scenario analysis and indicator validation techniques in the selection of alternative solutions.

1.4. The content of the course

Introduction to the course

Introduction to Analytical Management

Reasons for the introduction of analytical management

Structured Analytical Techniques (Case Studies)

Weighting

Probability estimation

Probability Tree

Tree and Utility Matrix

Advanced Utility Analysis

AHP - Analytical Hierarchical Process (Case Studies)

AHP - Analytical Hierarchical Process (Case Studies)

Strategic planning

SWOT/TOWS

PESTEL

Generation of hypotheses

Simple hypotheses

Multiple Hypothesis Generator Quadrant breakdown Hypothesis testing ACH - Concurrent Hypothesis Analysis/Basic and Advanced Application Scenarios and indicators Simple scenarios Analysis of alternative futures Generating multiple scenarios Indicator Validator		
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. <i>Obligations of students</i>		
<i>Student obligations are prescribed in detail by the Statute, the Study Regulations and the Instructions on Student Obligations. The key obligations of students are:</i> ATTENDANCE AT CLASSES: <i>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 commitments are;</i> <i>Full-time students must attend at least 70% of the total number of classes to be eligible to sign.</i> <i>Part-time students need to attend at least 50% of the total number of teaching hours to be eligible to sign.</i> EXAM: <i>in order to achieve a positive grade in a 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.</i> *FINAL EXAM – <i>a student who has not met the conditions for passing the exam during the continuous examination (has achieved a total of at least 54 points in the course and met the lower point threshold for the acquisition of each learning outcome, i.e. at least 50% of the points of each learning outcome), may take the learning outcomes</i>		

of the course at the final exam.

WRITTEN EXAM: the student is required to take a written exam that verifies the adoption of theoretical concepts related to analytical management, problem solving and business decision-making, and which demonstrates the identification and definition of key concepts, their connection and appropriate argumentation of a higher degree of complexity.

GROUP PROJECT: the student is obliged to participate in a group project that tests the acquisition of the skill of applying analytical techniques of decomposition and visualization (ranking and probability estimation).

PRACTICAL WORK: the student is obliged to participate in solving practical tasks and exercises before and during classes with the aim of practicing the skills of applying challenges and analysis of causes and consequences in solving specific business challenges.

**CONTINUOUS ASSESSMENT OF KNOWLEDGE: In order to improve the efficiency of students' progress in teaching, continuous examinations (3 intermediate exams) are carried out. In this way, students acquire smaller teaching units and master the subject material more easily.*

1.7. Monitoring of student work (add X with the appropriate form of monitoring)

Attendance	x	Teaching activity		Term paper		Experimental work	
Written exam	x	Oral exam		Essay		Research	
Design	x	Continuous assessment*		Paper		Practical work	x
Portfolio							

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

Assessment and evaluation of students' work during classes and at the final exam is carried out on the basis of the Study Regulations of the EFFECTUS University of Applied Sciences.

Allocation of points according to forms of student performance monitoring

	Attendance	Written exam	Design	Practical work	Total
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I1		16			16
I2		16			16
I3				16	16
I4			16		16
I5				16	16
I6		16			16
OUT OF THE BOX	4				4
TOTAL	4	48	16	32	100

Linking learning outcomes, teaching methods and methods of assessment of knowledge:

FORMS OF TRACKING	NAME OF LEARNING OUTCOMES	TEACHING METHOD	METHOD OF ASSESSMENT KNOWLEDGE	Maximum number of rating points
Written exam	OUTCOME 1 Critically assess the reasons for the introduction of analytical management in solving complex business challenges	Lecture	Exam in the form of an essay on a given topic: the student is required to take a written exam that tests the adoption of theoretical concepts related to analytical management, problem solving and business decision-making, and which demonstrates the identification and definition of key concepts, their connection and appropriate argumentation of a higher degree of complexity.	32
		Asking questions		
		Discussion		
	OUTCOME 2 Recommend ways to solve complex business problems using hypothesis generation and testing techniques	Lecture		
		Open questions		
Practical work	OUTCOME 3 To argue an opinion in the practical solution of complex problems by challenging techniques	Lecture	Problem tasks: problem tasks test the ability to apply challenge techniques to solve specific business challenges.	32
		Guided training		
		Training and feedback		
Design	OUTCOME 4 To argue an opinion in practical problem solving by decomposition and visualization	Guided training	Group project: the student is obliged to participate in a group project that tests the acquisition of the skill of applying analytical techniques of decomposition and visualization (ranking and probability estimation).	
		Training and feedback		

Practical work	OUTCOME 5 Critically judge the practical application of a particular method of cause and effect assessment.	Guided training	Problem tasks: problem tasks test the ability to apply cause and effect analysis techniques in solving specific business challenges.	32
		Training and feedback		
Written exam	OUTCOME 6 Critically assess the practical application of scenario analysis and indicator validation techniques in the selection of alternative solutions	Lecture	Cases and open issues: Case analysis verifies the ability to apply scenario analysis techniques and indicator assessment in strategic foresight.	
		Open questions		
		Guided training		
Attendance	All outcomes	Lectures and exercises	Attendance records	4
TOTAL POINTS				100

<i>Type of student workload</i>	<i>Hours of student workload</i>	<i>ECTS credits</i>
Attending face-to-face classes	70	2,33
Field trips/visits outside the college	0	0
Independent study/research	35	1,17
Out-of-classroom preparation and preparation of seminars/presentations	15	0,50
Work on an out-of-classroom project assignment	15	0,50
Independent preparation for exams and exam time	30	1,0
Consultation activities	15	0,50
Other	0	0
TOTAL ECTS credits	180	6

JUDGING:

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:

<i>NUMBER OF POINTS</i>	<i>RATING</i>
<i>0,00 – 53,90</i>	<i>Insufficient (1)</i>
<i>54,00 – 64,90</i>	<i>Sufficient (2)</i>

65,00 – 79,90	Good (3)
80,00 – 89,90	Very Good (4)
90.00 and more	Excellent (5)

The evaluation is carried out in a transparent manner by collecting points. The course is valued 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 by 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 subject. Points for the Challenge learning outcome are not distributed according to the learning outcomes, but the number achieved is 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 literature and number of copies in relation to the number of students currently attending classes in the course

Title	Number of copies	Number of students
Kopal, R. & Korkut, D. (2020). Analytical management. Effectus University of Applied Sciences	5* *students receive compulsory literature in permanent ownership	60

1.10. Supplementary literature

Bazerman, M. H. & Moore, D. A. (2012). Judgment in Managerial Decision Making 8th Edition, Wiley

Richards J. Heuer, Randolph H. Pherson (2014). Structured Analytic Techniques for Intelligence Analysis; 2nd Edition; CQ Press

Horvat, Đ. and Kovačić, M. (2004). Management in Small Business, Cera-prom, Zagreb

Kopal, R. and Korkut, D. (2011): Competitive Analysis 1: Structured and Creative Analytical Techniques, Zagreb: Effectus University College and Comminus, d.o.o.

1.11. Quality monitoring methods that ensure the acquisition of output knowledge, skills and competences

- *analysis of exam results, achieved results, level of understanding and knowledge during exercises, practical tasks and group work,*
- *conducting a survey among students,*
- *The teacher's evaluation,*
- *the achieved results and the level of knowledge presented during the preparation and defense of the final thesis (of students who choose the graduate thesis in this subject),*
- *analysis of the reports of the Quality Center 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.*