



COURSE UNIT (MODULE) DESCRIPTION

Course unit (module) title	Code
Fundamentals of scientific research methodology	

Academic staff	Core academic unit(s)
Coordinating: assoc. prof. Mangirdas Morkūnas, PhD Other:	Faculty of Economics and Business Administration, Department of Accounting and Auditing

Study cycle	Type of the course unit
Undergraduate	Compulsory

Mode of delivery	Semester or period when it is delivered	Language of instruction
In person	Autumn (7 th Semester)	English

Requisites	
Prerequisites: Business Statistics	Co-requisites (if relevant): Not applicable

Number of ECTS credits allocated	Student's workload (total)	Contact hours	Individual work
5	130	48	82

Purpose of the course unit: programme competences to be developed
<p>The aim of the subject is to provide knowledge about the application of different research methods in business research and to develop students' abilities to collect, systematize and analyze information enabling them to support business decisions.</p> <p><i>General competences and study program goals:</i></p> <p>1.2. Will be able to have constructive discussions, work independently and in a team, and be tolerant in multicultural and international groups and organizations.</p> <p>2.2. Will demonstrate creative thinking skills, ability to make innovative decisions.</p> <p><i>Specific competences and study program goals:</i></p> <p>4.1. Will be able to collect, process, systematize and evaluate economic, financial, statistical, accounting data and information, using the latest information search sources and applying modern methods of its processing and systematization, carry out research and present conclusions based on research results.</p> <p>4.2. Will be able to analyse and evaluate various economic and social processes, organizational behaviour and environment, interpret legislation and apply it to compiling of various reports, solution of organizational management and professional problems.</p> <p>5.3. Will be able to analyse, evaluate and forecast organization indicators, identify accounting and financial management problems, choosing complex technological, organizational and methodological measures, applying a systemic and global approach, as well as formulate conclusions, generalizations, proposals.</p>

Learning outcomes of the study programme	Learning outcomes of the course unit	Teaching and learning methods	Assessment methods
1.2. Will be able to have constructive discussions, work independently and in a team, and be tolerant in multicultural and international groups and organizations.	Will be able to justify chosen research methods to solve the problem of the bachelor's final thesis, as well as argue against/criticize the scientific research choices of their group mates.	Analysis of scientific literature, study of methodological material, discussion	Active participation in seminars, assessment continuous independent task (cumulative score).
2.2. Will demonstrate creative thinking skills, ability to make innovative decisions.	Will demonstrate creative thinking skills in selecting appropriate research methods. Will be able to creatively divide complex scientific problems into smaller ones, the solution of which is sufficient with simpler research methods.	Solving practical tasks, case analysis.	Mid-term test Exam
4.1. Will be able to collect, process, systematize and evaluate economic, financial, statistical, accounting data and information, using the latest information search sources and applying modern methods of its processing and systematization, carry out research and present conclusions based on research results.	Will be ready to independently collect, systematize and interpret the information needed to select a research design. Will be able to choose appropriate corporate accounting sources to solve the research problem.	Lectures, seminars, working with scientific literature and sources, creating reports, solving tasks, completing tasks in a virtual learning environment, individual work, statistical calculations.	Mid-term test Exam Continuous independent task
4.2. Will be able to analyse and evaluate various economic and social processes, organizational behaviour and environment, interpret legislation and apply it to compiling of various reports, solution of organizational management and professional problems.	Will be able to select econometric models for modeling the organization's operational processes and their impact on the company's indicators.	Lectures, seminars, work with scientific literature and sources, solving tasks, statistical calculations.	Exam Continuous independent task

5.3. Will be able to analyse, evaluate and forecast organization indicators, identify accounting and financial management problems, choosing complex technological, organizational and methodological measures, applying a systemic and global approach, as well as formulate conclusions, generalizations, proposals.	Will be able to combine different research methods in order to identify possible problem areas in the company's accounting that could potentially affect the integrity of the company's accounting process.	Lectures, seminars, work with scientific literature and sources, solving tasks, individual work, case analysis.	Exam Continuous independent task
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Content	Contact hours						Individual work: time and assignments		
	Lectures	Tutorials	Seminars	Workshops	Laboratory work	Internship	Contact hours, total	Individual work	Tasks for individual work
1. Review of scientific literature. Systematization, comparison. PRISMA, SALSAR methods.	2						2	6	Studying scientific literature, preparation of continuous independent task.
2. Bibliographic analysis. VosViewer, CiteSpace.	2		2				4	6	Studying the material provided by the teacher. Preparation of continuous independent task.
3. Quantitative research methods.	2						2	4	Studying scientific literature.
4. Questionnaire surveys.	2						2	8	Studying scientific literature. Preparation of continuous independent task.
5. Quantitative research based on secondary data analysis. Determination of causality. Statistical-econometric models.	6		4				10	10	Studying scientific literature, studying the material provided by the teacher. Preparation of continuous independent task.
<i>Mid-term exam (Topics 1-5)</i>	2						2	6	Repetition of material.
6. Qualitative research methods.	2		2				4	4	Studying scientific literature.
7. Content analysis.	2		2				4	4	Studying scientific literature, studying the material

									provided by the teacher.
8. Eisenhardt and Gioia's methodologies.	2						2	6	Studying scientific literature, studying the material provided by the teacher. Preparation of continuous independent task.
9. Research methods based on expert interviews.	2		2				4	6	Studying scientific literature, studying the material provided by the teacher. Preparation of continuous independent task.
10. Research methods based on pairwise comparison (BWM, AHP).	4		4				8	4	Studying scientific literature, studying the material provided by the teacher.
11. Focus groups, Delphi methods.	2						2	4	Studying scientific literature.
12. Experiment, Observation.	2						2	4	Studying the material provided by the teacher. Preparation of continuous independent task.
<i>Preparation for the exam</i>								10	Repetition of material.
Total	32		16				48	82	

Assessment strategy	Weight %	Deadline	Assessment criteria
Mid-term test	40% (40 points)	November	<p>The evaluation of student's progress consists of theoretical and practical tasks of varying complexity. The purpose of the mid-term test is to check how students have mastered knowledge related to the application of scientific literature analysis and quantitative research methods to solving both practical business and scientific problems.</p> <p>Assessment:</p> <p>Excellent: Excellent knowledge and ability. The student has reached the assessment level, i.e. is able to perform a detailed analysis of scientific literature, formulate hypotheses based on it, choose an appropriate quantitative research method, apply it to solve the research problem, evaluate and properly interpret the obtained results in both practical and scientific terms. All tasks are solved without errors and inaccuracies.</p> <p>Very Good/Good: The student has achieved the assessment level, i.e. is able to perform an analysis of scientific literature, formulate hypotheses based on it, choose an appropriate quantitative research method, apply it to solve the research problem, evaluate and properly interpret the obtained results in both practical and scientific terms. There are minor errors and inaccuracies.</p>

			<p>Average: knowledge and skills are average. The student is able to solve about 2/3 of the given tasks correctly.</p> <p>Satisfactory/poor: knowledge and skills are minimal. The student makes fundamental mistakes in determining the theoretical basis of the research and/or choosing the research method. There are errors in processing the results of the quantitative study.</p> <p>Unsatisfactory: Minimum requirements are not met. The student is unable to apply theoretical knowledge in the process of solving practical tasks.</p>
Independent continuous task	20% (20 points)	During the semester	<p>Excellent: completed all assigned parts of a continuous independent task on time, independently, and with excellence.</p> <p>Very Good/Good: completed all assigned parts of continuous independent task on time and independently, with few (minor) errors.</p> <p>Average: completed more than 2/3 of the assigned parts of the continuous task on time and independently; errors and inaccuracies occur in decisions.</p> <p>Satisfactory/Poor: Completes more than half of the assigned parts of the continuous task on time, many (major) errors.</p> <p>Unsatisfactory: completes less than half of the assigned parts of a continuous independent task and makes many (major) errors or does not complete the task at all.</p> <p>Independent continuous task consists of a continuous research project, carried out by students independently at home. Its components (introduction, scope of scientific literature review, scope of methodology, research design) are presented during seminars. The final report consists of 10-12 sheets, which are submitted to the teacher in MS Word format.</p>
Exam	40%. (40 points)	January	<p>The exam consists of theoretical and practical tasks of varying complexity. The purpose of the exam is to test how well students have mastered knowledge related to the application of qualitative research to solving both practical and theoretical problems in the field of accounting and auditing.</p> <p>Assessment:</p> <p>Excellent: Excellent knowledge and ability. The student has reached the assessment level, i.e. i.e. is able to choose an appropriate qualitative research method, apply it to the analyzed situation, evaluate and interpret the obtained results and position them in one of the prevailing scientific currents in the researched field. All tasks are solved without errors and inaccuracies.</p> <p>Very good/good: knowledge and skills are (very) good. The student is able to choose an appropriate qualitative research method, apply it to the analyzed situation, evaluate and interpret the obtained results and position them in one of the prevailing scientific currents in the researched field. Minor errors and inaccuracies may occur when solving tasks.</p> <p>Average: knowledge and skills are average. The student is able to solve about 2/3 of the given tasks correctly.</p> <p>Satisfactory/poor: knowledge and skills are minimal. The student makes fundamental mistakes when choosing qualitative research methods to solve accounting and/or audit problems. Research does not allow to acquire reliable results.</p>

			Unsatisfactory: Minimum requirements are not met. The student is unable to apply any theoretical knowledge in the process of solving practical tasks
Active participation in seminars (<i>Extra Points</i>)	10 points	During the semester	Actively participates in seminars, constructively criticizes research methods/research ideas chosen by colleagues. Proposes solutions to address identified deficiencies.
Final assessment			The final assessment consists of the total number of points collected during the mid-term test and the exam, as well as the assessment of the continuous independent task and active participation in the seminars. Excellent: 95 points or more. Very good: 85-94 points. Good: 75-84 points. Average: 65-74 points. Satisfactory: 55-64 points. Weak: 45-54 points. Unsatisfactory: less than 45 points.
Equivalency examination	100%		The exam consists of closed and open test tasks of varying complexity. The purpose of the exam is to check how students have mastered the knowledge of topics 1-12, related to the ability to perform a qualitative analysis of scientific literature and to select appropriate quantitative and qualitative research methods for solving scientific and practical accounting and/or auditing problems. Assessment: Excellent: 95-100% correct answers. Very good: 85-94% correct answers. Good: 75-84% correct answers. Average: 65-74% correct answers. Satisfactory: 55-64% correct answers. Weak: 45-54% correct answers.

Author (s)	Publishing year	Title	Issue of a periodical or volume of a publication	Publishing house or web link
Required reading				
Bryman, A.	2016	Social Research Methods	5th edition	Oxford, Oxford University Press.
Babbie, E.	2020	The Practice of Social Research	15th edition	Wadsworth, Cengage Learning.
Recommended reading				
Miles, M. B., Huberman A. M., Saldana J.	2020	Qualitative data analysis. A methods source book	4th edition	Thousand Oaks, Sage