



## COURSE UNIT (MODULE) DESCRIPTION

Course unit (module) title	Code
<b>ECONOMIC STATISTICS</b>	

Academic staff	Core academic unit(s)
<b>Coordinating:</b> Assoc. Prof. Dr Ilona Kiaušienė	Kaunas Faculty
<b>Other:</b>	Institute of Languages, Literature and Translation Studies <input type="checkbox"/> Institute of Social Sciences and Applied Informatics <input checked="" type="checkbox"/>

Study cycle	Type of the course unit
First <input checked="" type="checkbox"/> Second <input type="checkbox"/>	Compulsory Course <input checked="" type="checkbox"/> Optional Course <input type="checkbox"/> Course Unit (Module) of the General University Studies <input type="checkbox"/> Course Unit (Module) of Individual Studies <input checked="" type="checkbox"/> Interdisciplinary Studies Course Unit (Module) <input type="checkbox"/>

Mode of delivery	Semester or period when it is delivered	Language of instruction
Face to face	3 <sup>rd</sup> semester	English

Requisites	
<b>Prerequisites:</b> Microeconomics, Macroeconomics	<b>Co-requisites (if relevant):</b> –

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

Purpose of the course unit		
The subject aims to provide knowledge of the concepts of economic statistics, basic statistical indicators, and their calculation methods, and to develop the ability to research, analyze, evaluate, and forecast economic phenomena in a constantly changing environment.		
Learning outcomes of the course unit	Teaching and learning methods	Assessment methods
Will be able to independently collect and analyze statistical data reflecting the country's economic situation using advanced information-processing methods.	Active learning methods (situation analysis, task performance), research methods (information search, literature analysis, and synthesis).	Midterm assessment. Assessment of task performance.
Will be able to identify and solve problems that arise during a statistical study, predict activity goals, and distribute priorities in order to achieve activity goals.	Active learning methods (task performance), research methods (information search, literature analysis, and synthesis).	Midterm assessment. Assessment of task performance.
Will be able to use the methods studied in statistical theory to summarize information obtained from various sources.	Traditional lecture, problem-based teaching, active learning methods (task performance), and research methods (information search, literature analysis, and synthesis).	Exam. Midterm assessment. Assessment of task performance.
Will be able to evaluate economic phenomena and identify problems, and	Traditional lecture, problem-based teaching, active learning methods (situation analysis, group discussion, task performance), and	Midterm assessment. Assessment of task performance.

suggest possible alternatives for solving them.	research methods (information search, literature analysis, and synthesis).	
Will be able to independently collect, process, analyze, and interpret data, applying the principles and methods of calculating statistical indicators.	Active learning methods (task performance), research methods (information search, literature analysis, and synthesis).	Exam. Midterm assessment. Assessment of task performance.
Will be able to analyze and forecast economic indicators, assessing changes and their interrelationships.	Traditional lecture, problem-based teaching, active learning methods (situation analysis, group discussion, task performance), and research methods (information search, literature analysis, and synthesis).	Exam. Midterm assessment. Assessment of task performance.

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. <b>Introductory lecture.</b> Introduction to the course, introduction to object of the studies, requirements, structure of the course, methodology of work during lectures.	1						1	2	Review of the subject description. Information search.
2. <b>Description of the theory and methodology of statistics.</b> The basic concepts of statistics. Principles of organization and work of statistics.	1						1	2	Information search. Analysis and summary of the topic covered in the literature (see items 1, 2, 3, and 11 in the list of literature).
3. <b>Statistical observation, classification, and objectives.</b> Forms, types, and methods of statistical observation. Implementation of statistical observation. Grouping and presentation of collected data.	2			4			6	8	Analysis and summary of the topic covered in the literature (see items 1, 2, 3, 9, 11, and 12 in the list of literature). Data collection and grouping.
4. <b>Statistical indicators.</b> The concept of a statistical indicator and its forms of expression. Methods of calculating statistical indicators. Application of statistical indicators in the study of economic phenomena.	2			6			8	10	Analysis and summary of the topic covered in the literature (see items 1, 2, 4, 5, 7, 9, 11, and 12 in the list of literature). Data collection and systematization. Calculation, analysis, and interpretation of statistical indicators.
Midterm assessment.	2						2	8	Independent study, literature review. Preparation for and completion of the midterm assessment.
5. <b>Indicators of the position and dispersion of data.</b> The concept of the statistical average and its application possibilities. Data dispersion.	2			6			8	10	Analysis and summary of the topic covered in the literature (see items

									1, 2, 4, 5, 7, 9, 11, and 12 in the list of literature). Data collection and systematization. Calculation, analysis, and summarization of indicators.
<b>6. Study of the dynamics of phenomena.</b> Types of dynamic series and methods of compilation. Indicators and models of dynamic (time) series. Dynamics of economic phenomena.	2		6			<b>8</b>	<b>10</b>		Analysis and summarization of the topic covered in the literature (see items 3, 4, 6, 8, and 9 in the list of literature). Data collection and systematization. Calculation, analysis, and interpretation of indicators.
<b>7. Application of indices for analysis.</b> The essence and purpose of indices. Types of indices.	2		2			<b>4</b>	<b>6</b>		Analysis and summary of the topic covered in the literature (see items 1, 2, 5, 6, 7, 9, and 11 in the list of literature). Calculation, analysis, and interpretation of indicators.
<b>8. Economic phenomena and their interrelationships.</b> Correlation and regression analysis. The interaction of economic indicators.	2		4			<b>6</b>	<b>8</b>		Analysis and summary of the topic covered in the literature (see items 1, 6, 7, 8, 9, 10, 11, and 12 in the list of literature). Calculation, analysis, and forecasting of indicators. Determination of the interrelationship between indicators.
Tasks using SPSS and their evaluation.			4			<b>4</b>	<b>6</b>		Independent study, completion of tasks, and submission of work.
Independent review of course material and preparation for the exam.							<b>12</b>		Independent study, literature review. Exam preparation and taking the exam.
<b>Total</b>	<b>16</b>		<b>32</b>			<b>48</b>	<b>82</b>		
<b>Note:</b> Up to 4 contact hours may be replaced by guest lectures given by social partners or educational visits to social partner organisations.									

Assessment strategy	Weight %	Deadline	Assessment criteria
Task completion (data collection and organization, calculation of economic indicators, analysis, interpretation, identification of interrelationships, forecasting, substantiation)	30	During the semester	Individual / group work (practical assignments and tasks). Assessment criteria: <b>10 points.</b> Questions answered comprehensively, summarized knowledge demonstrated, insights from theoretical literature used, ability to evaluate critically demonstrated, and tasks completed correctly.

of conclusions, tasks using SPSS, etc.)			<p><b>9 points.</b> The essence of the questions was revealed, summarized knowledge was demonstrated, reasons were explained, and tasks were completed correctly.</p> <p><b>8 points.</b> Demonstrated coherent knowledge and understanding: essential parts are linked and integrated into a whole, tasks are completed with minor errors.</p> <p><b>7 points.</b> Multi-structured knowledge demonstrated: focus on several important aspects, but not all of them are properly linked, and tasks are completed with errors.</p> <p><b>6 points.</b> Demonstrated multi-structured knowledge: focused on several important aspects, but they are not linked together, and tasks are completed with errors.</p> <p><b>5 points.</b> Demonstrated single-structured knowledge: answers focused on one aspect, answers based on listing facts, and tasks are completed with errors.</p> <p><b>4–0 points.</b> Minimum requirements not met, inappropriate or incorrect facts used, incorrect answers or no answers to questions, tasks not completed.</p> <p>The final score is the arithmetic average of the grades for the completed tasks. The number of points scored by the student is multiplied by 30%.</p>
Midterm assessment	30	Week 9 to 10	<p>The midterm assessment covers 2-4 topics. It comprises 1–3 practical tasks and/or 2–5 exercises (of varying difficulty, ranging from comprehension to analysis; each is graded, with points assigned). The following are assessed: calculation of statistical indicators (correct application of formulas and/or Excel and/or SPSS software, accuracy of calculations), summarization and interpretation of the results obtained (presentation of arguments, logical reasoning, formulation of conclusions). Assessment is as follows:</p> <p><b>10 points.</b> Excellent knowledge and skills. Assessment level. 95–100% correct answers.</p> <p><b>9 points.</b> Very good knowledge and skills, there may be minor mistakes. Level of synthesis. 85–94% correct answers.</p> <p><b>8 points.</b> Average knowledge and skills, there are mistakes. Level of analysis. 75–84% correct answers.</p> <p><b>7 points.</b> Knowledge and skills are below average, there are (substantial) mistakes. Level of knowledge application. 65–74% correct answers.</p> <p><b>6 points.</b> Knowledge and skills still meet the minimum requirements. Lots of mistakes. Level of knowledge application. 55–64% correct answers.</p> <p><b>5 points.</b> Knowledge and skills still meet the minimum requirements. Lots of mistakes. Level of descriptions. 45–54% correct answers.</p> <p><b>4–0 points.</b> Minimum requirements not met. Less than 44% correct answers.</p> <p>The number of points scored by the student is multiplied by 30 %.</p>
Exam	40	Exam date	<p>The exam covers 5–8 topics. It comprises 2–4 practical tasks and/or 3–5 exercises (of varying difficulty, ranging from comprehension to analysis; each is graded, with points assigned). The following are assessed: calculation of indicators, identification of interrelationships between economic phenomena (proper use of formulas and/or Excel and/or SPSS software, accuracy of calculations), and the synthesis and interpretation of results (presentation of arguments, logical reasoning, formulation of conclusions). Assessment is as follows:</p> <p><b>10 points.</b> Excellent knowledge and skills. Assessment level. 95–100% correct answers.</p> <p><b>9 points.</b> Very good knowledge and skills, there may be minor mistakes. Level of synthesis. 85–94% correct answers.</p>

			<p><b>8 points.</b> Average knowledge and skills, there are mistakes. Level of analysis. 75–84% correct answers.</p> <p><b>7 points.</b> Knowledge and skills are below average, there are (substantial) mistakes. Level of knowledge application. 65–74% correct answers.</p> <p><b>6 points.</b> Knowledge and skills still meet the minimum requirements. Lots of mistakes. Level of knowledge application. 55–64% correct answers.</p> <p><b>5 points.</b> Knowledge and skills still meet the minimum requirements. Lots of mistakes. Level of descriptions. 45–54% correct answers.</p> <p><b>4–0 points.</b> Minimum requirements not met. Less than 44% correct answers.</p> <p>The number of points scored by the student is multiplied by 40 %.</p>
--	--	--	---

#### REGARDING THE EXTERNAL EXAMINATION OF THE COURSE UNIT

Mark <input checked="" type="checkbox"/>			If permitted, please provide the conditions	
Not permitted	<input checked="" type="checkbox"/>	Permitted	<input type="checkbox"/>	

#### REGARDING THE USE OF GENERATIVE ARTIFICIAL INTELLIGENCE (GenAI) TOOLS (SUCH AS CHATGPT, ETC.) WHEN STUDYING THE COURSE UNIT

Mark <input checked="" type="checkbox"/>			If permitted, please provide the conditions	
Not permitted	<input checked="" type="checkbox"/>	Permitted	<input type="checkbox"/>	

#### REGARDING ACADEMIC PROGRESS

A student who (1) **throughout the semester consistently** fails to demonstrate **progress in achieving the expected learning outcomes of a subject (module)** during the practical classes (seminars, exercises, laboratory work, etc.) and (2) fails to complete all interim assessment requirements and tasks within the time specified in the course description, is not allowed to participate in the examination session.

Only SPSS tasks completed in class are assessed and credited. Tasks completed outside of class using SPSS are considered independent learning and are not assessed.

The student's knowledge and skills are assessed with grades from 1 to 10. The course has been passed if:

- The results of all tasks, interim settlements, and midterm exam are at least 5.
- The examination grade is at least 5.

Author (-s)	Publishing year	Title	Issue of a periodical or volume of a publication	Publishing house or web link
<b>Required reading</b>				
1. Bartosevičienė, V.	2011	Ekonominės statistikos pagrindai		Kaunas: Technologija
2. Donnelly, R. A., & Haddad, S.	2025	Business Statistics	4th edition	Pearson
3. Martišius, S. A.	2014	Statistikos metodai socialiniuose ekonominiuose tyrimuose		Vilnius: Vilniaus universiteto leidykla
4. Shumway, R. H., & Stoffer, D.S.	2016	Time Series Analysis and Its Applications	Fourth Edition	<a href="http://www.stat.ucla.edu/~fr ederic/415/S23/tsa4.pdf">http://www.stat.ucla.edu/~fr ederic/415/S23/tsa4.pdf</a>
5. Cortinhas, C., & Black, K.	2012	Statistics for business and economics		Chichester: Wiley
<b>Recommended reading</b>				
6. Donnelly, R. A.	2015	Business Statistics	2nd Edition	Pearson
7. Holmes, A., Illowsky, B., & Dean, S.	2018	Introductory Business Statistics		<a href="https://openstax.org/details/books/introductory-business-statistics">https://openstax.org/details/books/introductory-business-statistics</a>

8. Groebner, D. F. ... [et al.]	2011	Business statistics: a decision-making approach	8th ed., international edition	Boston
9. Stundžienė, A.	2018	Ekonominės statistikos praktikumai su MS EXCEL		KTU leidykla Technologija
10. Bekešienė, S.	2015	Duomenų analizės SPSS pagrindai.		Vilnius: Generolo Jono Žemaičio Lietuvos karo akademija. Prieiga per <a href="http://www.tb.lt/Leidiniai/Mokomieji/duomenu%20analizes%20spss%20pagrindai_Bekesiene.pdf">http://www.tb.lt/Leidiniai/Mokomieji/duomenu%20analizes%20spss%20pagrindai_Bekesiene.pdf</a>
11.	2026	Statistics Lithuania. State Data Agency.		<a href="https://vda.lrv.lt/en/">https://vda.lrv.lt/en/</a>
12.	2026	Eurostat		<a href="https://ec.europa.eu/eurostat">https://ec.europa.eu/eurostat</a>