



Syllabus

Term: 2025/26/2 **Subject name:** Probability and Statistics **Subject code:** B19GMK06E

Unit (Unit code) Department of Economics and Econometrics (KÖI)

Lecturer responsible for the course: Dr. KEHL Dániel

Requirement: Exam

Classes per week : 2/2/0/0

Classes per term:

Purpose of education:

The module aims to develop a basic understanding in probability theory (discrete and continuous distributions) and basic statistical methods (both descriptive and inferential). It builds a basis in methodology for both theoretical and practical issues in the given field. The module helps to understand ethical questions, concepts of data analysis and methods covered in more advanced statistics courses. Data analytic skills are among the most in-demand jobs nowadays and in the coming years.

Contents:

The discussion of topics is divided into the following ten chapters, first 10 chapters of the essential learning material:

1. Introduction
2. Organizing and Visualizing Data
3. Numerical Descriptive Measures
4. Basic Probability
5. Discrete Probability Distributions
6. The Normal Distribution and Other Continuous Distributions
7. Sampling and Sampling Distributions
8. Confidence Interval Estimation
9. Fundamentals of Hypothesis Testing: One-Sample Tests
10. Two-Sample Tests

System of examining and valuation:

ormative assessment elements: Oral feedback on in-class activities, discussion of the solution of practical exercises solved during the classes, QA sessions before midterm tests, quizzes and drop-in office hours.

Summative assessment elements:



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System of examing and valuation:

Individual Assessment	100%	Group Assessment	0%
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Name of the element	Weight	Type	Details	Retake opportunity	Req.*	Related CILOs
Midterm 1	15%	Individual written exam	A written exam based on chapters 1-3, containing 3-4 questions.	-	no	1, 4, 5
Midterm 2	15%	Individual written exam	A written exam based on chapters 4-7, containing 3-4 questions.	-	no	2, 4, 5
Midterm 3	15%	Individual written exam	A written exam based on chapters 8-10, containing 3-4 questions.	-	no	3, 4, 5
Weekly assessments	10%	quiz	weekly quizzes (10 x 1%)	-	no	1, 2, 3, 4
Final exam	45%	Individual written exam	A written exam based on chapters 1-10, containing 5-6 questions.	one retake opportunity	yes	1, 2, 3, 4, 5, 6

* Req.: Completion of the element is required to pass the course, irrespective of the performance in other elements.

Bibliography:

Berenson, M. L., Levine, D., Szabat, K., and Stephan, D. (2019): Basic Business Statistics: Global Edition 14/e, ISBN: 978-0134684840



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Bibliography: