

# Andrzej Frycz Modrzewski Krakow University

## **SUBJECT CARD**

#### 1. Rasic information

1. Basic information	
Subject	Statistics
Faculty	Faculty of Law
Field of study	International Relations
Specialisation	International Business
PQF level	6 PQF
Level of studies	first-cycle studies
Form of studies	full-time studies
Group of activities	
Number of ECTS credits	6
Subject type	obligatory
Total numer of hours	30h
Didactic cycle	2024/2025 winter
Academic semester	4
Academic year	2
Education profile	general academic
Year of implementation	2025/2026
Language of instruction	English
Person responsible for the subject	dr Piotr Staliński (e-mail: pstalinski@uafm.edu.pl)

#### Semester, number of ECTS credits, class type, number of hours

Sem	nester	Lecture	Class	ECTS
	4	20h	10h	6

## 2. Subject objectives

C1	The course provides students with a conceptual introduction to the field of statistics and its many applications.
	The course will cover a variety of subject areas including descriptive statistics, introduction to probability,
	discrete and continuous probability distributions, sampling and sampling distributions, and interval estimation.
	The discussion and development of each technique will be presented in an application setting, with the statistical
	results providing insights to decisions and solutions to problems.

### 3. Prerequisites

Mathematics for Economists.

### 4. Learning content

W1	Knowledge: to summarize data using basic graphical and tabular tools	EUK6_W1
W2	Knowledge: to characterize data using basic numerical measures.	EUK6_W1
W3	Knowledge: to discuss the concept of random variables, probability distributions, and their parameters	EUK6_W1
W4	Knowledge: to discuss and apply discrete and continuous probability distributions including binomial and normal distributions.	EUK6_W1
W5	Knowledge: to explain the purpose of statistical inference, sampling, and sampling distributions.	EUK6_W1
W6	Knowledge: to explain and apply the concept of confidence intervals for population mean and proportion.	EUK6_W1
U1	Skills: applies the concept of statistical inference - calculates confidence intervals and conducts hypothesis testing - to make conclusions about the characteristics of studied populations applies computer tools to calculate probabilities, perform interval estimation, and conduct hypothesis testing.	EUK6_U2
K1	Social competence: discusses and applies the concept of random variables, probability distributions, and their parameters	EUK6_KS1

#### 5. Curriculum content

### Lecture (20 h)

Code	Topic blocks ( semester: 3)
Wyk1	Descriptive statistics: tabular and graphical methods.
Wyk2	Descriptive statistics: numerical methods.
Wyk3	Discrete and continuous probability distributions.
Wyk4	Sampling and sampling distributions.
Wyk5	Confidence intervals: population mean and proportion.

### Class (10 h)

Code	Topic blocks ( semester: 3)
Cw1	Descriptive statistics: numerical methods.
Cw2	Discrete and continuous probability distributions.
Cw3	Confidence intervals for the mean and the proportion.

### 6. Teaching methods

Lecture			
M4	Computer exercises		
M18	Problem solving		
M20	Lecture		
Class	Class		
M4	Computer exercises		
M18	Problem solving		
M20	Lecture		

#### 7. Student workload

Form of student activity	Student workload
Lecture	20h
Including the e-learning method:	0 h
Class	10h
Including the e-learning method:	0h
Student's own work	
	120h
Total workload	
Total number of hours for the course	150 h
Total number of ECTS credits	6 ECTS

#### 8. Evaluation criteria

Course completion criteria:

The workshop test involving solving computational problems (a passing mark of at least 3.0 is required to be admitted to the exam). The exam.

Lectures (Final exam / Final pass)		
Grade 5:	88-100 pkt.	
Grade 4,5:	80-87 pkt.	
Grade 4:	70-79 pkt.	
Grade 3,5:	60-69 pkt.	
Grade 3:	50-59 pkt.	

Class (Final exam / Final pass)	
Grade 5:	88-100 pkt.
Grade 4,5:	80-87 pkt.
Grade 4:	70-79 pkt.

Grade 3,5:	60-69 pkt.
Grade 3:	50-59 pkt.

### 9. Reading materials

#### **Course reading materials**

1. Anderson, Sweeney, Williams, Statistics for Business and Economics, Thomson, 11th ed. 2011 (electronic version available)

#### Supplementary materials

1. Levine, Stephan, Krehbiel, Berenson, Statistics for Managers using Excel, 5th ed. Prentice Hall, 2008 (electronic version available).

#### 10. Information about academic teachers

Lecturer(s) dr Piotr Staliński (e-mail: pstalinski@uafm.edu.pl)