

Course description

Course name		Statistics					Course code		
Major		Finance & Accounting							
Profile		Practical							
Level of studies		First-cycle studies							
Specialization		Course common to all specializations							
Form of studies		Full-time studies							
Semester		II				Language of instruction		English	
Prerequisites for the course						Basic courses		N	
Form of crediting		End-of-term test		Number of ECTS points: 3				Methods of assessment	
Form of classes and other		Number of hours in semester		Total	3	direct contact classes	1,2		practical classes
		Total	Student's workload	Direct contact	Verification of teaching effects				Importance in %
Lecture		31	16	15	Written exam				50%
Laboratory		31	16	15	Test, activity				50%
Consultation		2		2					
Total number of hours:		64	32	32					Total: 100%
Categories of teaching effects	No.	Course teaching effects			Methods of teaching effects verification	Major-related effects	Area based effects	Forms of realization	
Knowledge	1.	Student knows the selected discrete probability distributions.			written exam	K1_W14+	S1A_W06+	L Lab	
	2.	Student knows the selected continuous probability distributions.			written exam	K1_W14+	S1A_W06+	L Lab	
	3.	Student knows the concept of expected value, variance, distribution function.			written exam	K1_W14+	S1A_W06+	L Lab	
	4.	Student knows the concept of the two-dimensional distribution.			written exam	K1_W14+	S1A_W06+	L Lab	
Skills	1.	Student is able to calculate the expected values, variances, to calculate the cumulative distribution function for the selected discrete and continuous distributions.			written exam	K1_U09+	S1A_U2+, S1A_U3+, +	Lab	
	2.	Student is able to calculate the total probability, conditional probability using the classic definition of probability.			written exam	K1_U09+	S1A_U2+, S1A_U3+, +	Lab	

	3.	Student is able to calculate the marginal distributions, the correlation coefficient for a discrete two-dimensional random variable.	written exam	K1_U09+	S1A_U2+, S1A_U3+, +	Lab
Social competence	1.	Student has a self-awareness of the need to develop his/her knowledge and skills.	written exam	K1_K02+, K1_K05+	S1A_K01+, S1A_K06+	L Lab
	2.	He can flexibly look for and choose problem-solving methods.	written exam	K1_K02+, K1_K05+	S1A_K01+, S1A_K06+	L Lab
	3.	Student is prepared to communicate, persuade and defend his/her views in the name of achieving common goals.	written exam	K1_K02+, K1_K05+	S1A_K01+, S1A_K06+	L Lab

Course supervisors

Form of classes	Course supervisors
Lecture	Prof. dr hab. A Nowak
Laboratory	Prof. dr hab. A Nowak

Teaching content

Lecture	Teaching methods	
No.	Subject area	Number of hours
1.	Combinatorics	2
2.	Probability theory. Probability and its properties. The classical definition of probability.	2
3.	Conditional and total probability. Bayes' formula	2
4.	Random variable. The probability distribution. Selected discrete distributions. Expected value, variance, the distribution.	3
5.	Continuous random variables and their distributions.	3
6.	Discrete two-dimensional random variable (marginal distributions, independence of random variables, the correlation coefficient, conditional distributions).	2
7.	Test	1
Total no. of hours:		15

Laboratory	Teaching methods	
No.	Subject area	Number of hours
1.	Combinatorics	2
2.	Probability theory. Probability and its properties. The classical definition of probability.	2
3.	Conditional and total probability. Bayes' formula.	2
4.	Random variable. The probability distribution. Selected discrete distributions. Expected value, variance, the distribution.	3
5.	Continuous random variables and their distributions.	3
6.	Discrete two-dimensional random variable (marginal distributions, independence of random	2

	variables, the correlation coefficient, conditional distributions)	
7.	Test	1
Total no. of hours:		15

Primary literature:

1	S. Ostasiewicz, Z. Rusnak, U. Siedlecka, Statystyka. Elementy teorii i zadania. Wydawnictwo Akademii Ekonomicznej we Wrocławiu, Wrocław 2003.
2	Metody statystyczne / Aleksander Zeliaś. - Warszawa : Polskie Wydaw. Ekonomiczne, 2000.
3	Metody statystyczne : zadania i sprawdziany / Aleksander Zeliaś, Barbara Pawelek, Stanisław Wanat. - Warszawa : Polskie Wydaw. Ekonomiczne, 2002
4	Krysicki W. i inni (1995). Rachunek prawdopodobieństwa i statystyka matematyczna w zadaniach, część I PWN, Warszawa
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Secondary literature:

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Course co-ordinator

signature

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Director of Institute

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