Syllabus of the educational discipline
«*The fundamentals of data analysis*»

Specialty	*122 Computer Science*
Educational program	*Business analytics and information systems in entrepreneurship*
Level of education	*second (master's)*
Discipline status	*selective*
Teaching language	*English*
Course / semester	*1 course, 1 semester*
Number of credits ECTS	*5*
Distribution by types of trainings and hours of study	*Lectures – 20 hours.*
	Laboratory stusies – 20 hours.
	Independent training – 110 hours.
Form of final assessment	*Exam*
Department	*Statistics and economic forecasting, 61166, Kharkiv, 9a Nauki Ave., S. KUZNETS KhNUE , Phone +38(057)702-18-32, website: https://statistics.hneu.edu.ua/*
Teacher (-s)	*Olha Brovko, PhD (Economics), Associate professor*
Teacher's contacts	*ol.iv.brovko@gmail.com*
Days of the classes	*Every Wednesday*
Consultations	*Tuesday, 10.15, Friday, 12. 10, aud. 406, 1 corps*

The purpose of the discipline is

the formation of theoretical knowledge, applied skills and skills in the organization of statistical observations, methods of statistical analysis and forecasting socio-economic phenomena and processes

Prerequisites for learning

List of previously listened disciplines: statistics, computer science, business economics.
Knowledge, skills, abilities that the applicant must have to start studying the discipline: basics of statistics, computer science, be able to apply mathematical tools and have the skills to work in Microsoft Office (Word, Excel, PowerPoint).

Content of the educational discipline

Content module 1. Methodological bases of data analysis
Theme 1. Nature of observation of socio-economic objects
Theme 2. Sampling: its construction and verification of its representativeness
Theme 3. Grouping data and studying groups
Content module 2. Methods of research and analysis of the components of socio-economic systems
Theme 4. Indicators of data research.
Theme 5. World indexes and their research

Material and technical support (software) of the discipline
Microsoft Office (Word, Excel, PowerPoint)

Course page on the Moodle platform (personal training system)	*https://pns.hneu.edu.ua/course/view.php?id=4705*

Recommended literature

Main: 1. Андрієнко В.Ю. Статистичні індекси в економічних дослідженнях / В. Ю. Андрієнко. – К. : 2004. – 536 с. 2. Статистика. Навчальний посібник / Під ред. д.е.н., професора Раєвнєвої О.В. – Харків: Вид. ХНЕУ, 2010. – 520 с. 3. Marcelo Fernandes. Statistics for Business and Economic. 2009. - P.150 - http://russell-davidson.arts.mcgill.ca/e257/Marcelo_Fernandes.pdf. 4. Дягтерев Д.А. Количественные методы в международных исследованиях. Международные процессы, Том 13, № 2, с. 35-54. 5. Єріна А.

М. Статистичне моделювання та прогнозування: навч. посіб. / А. М. Єріна. – Київ : КНЕУ, 2001. – 170 с. 6. G. Scott Owen. History of Visualization. – 2010 –Р. 97. 7. Офіційний сайт Європейського центрального банку [Електронний ресурс]. – Режим доступу: https://www.ecb.europa.eu/stats/html/index.en.html. 8. Офіційний сайт Міждержавного статистичного комітету об'єднання незалежних держав [Електронний ресурс]. – Режим доступу: http://www.cisstat.com

Assessment system of learning outcomes

Assessment of formed competencies of students is carried out on a cumulative 100-point system, control measures include: current control, which is carried out during the semester during lectures and laboratory classes and is assessed by the sum of points (maximum - 60 points; minimum amount that allows students to exam - 35 points); final / semester control, which is conducted in the form of a semester exam, according to the schedule of the educational process (maximum amount - 40 points, minimum amount that allows a student to pass the exam - 25 points).

More detailed information on assessment is given in the technological card of the discipline: https://pns.hneu.edu.ua/course/view.php?id=4705

Accumulation of rating points in the discipline

Types of training	Max points
Attending lectures	10
Protection of laboratory works	25
Written Test	5
Control work	20
Exam	40
Max points	**100**

Transference of Simon Kuznets KHNUE Characteristics of Students' Progress into the System of the ECTS Scale

Total score on a 100-point scale	ECTS assessment scale	Assessment on the national scale	
		for exam, differentiated test, course project (work), practice, training	for pass
90 – 100	A	excellent	pass
82 – 89	B	good	
74 – 81	C		
64 – 73	D	satisfactory	
60 – 63	E		
35 – 59	FX	unsatisfactory	not pass
1 – 34	F		

Discipline policies

The policy of observance of academic integrity, the Policy on absences of classes, the Policy on performance of tasks after the established term see in the Work program of academic discipline. The policy of the academic discipline is built taking into account the norms of the current legislation of Ukraine and the normative documents of the University. The teaching of the discipline is based on the principles of academic integrity, which is defined in the Code of Academic Integrity of the Semyon Kuznets Kharkiv National University of Economics https://www.hneu.edu.ua/akademichna-dobrochesnist/

***More detailed information about competencies, learning outcomes, teaching methods, assessment forms, independent training is given in the Syllabus (working plan)of the educational discipline** https://pns.hneu.edu.ua/course/view.php?id=4705*

Syllabus approved at the meeting of the Department Statistics and economic forecasting.
Protocol № 3 from 19.09.2020