



Syllabus of the educational discipline «Data and Decision Making»

Specialty	122 Computer Science
Educational program	122. 010 Computer Science
Level of education	Second (master's)
Discipline status	Selective
Teaching language	English
Course / semester	1 course, 2 semester
Number of credits ECTS	5
Distribution by types of trainings and hours of study	Lectures – 20 hours. Laboratory studies – 20 hours. Independent training – 110 hours.
Form of final assessment	Pass
Department	Statistics and economic forecasting, 61166, Kharkiv, 9a Nauki Ave., S. Kuznets KhNUE , phone +38(057)702-18-32, department website: https://statistics.hneu.edu.ua/
Teacher (-s)	Rayevnyeva Olena, D.Sc. (Economics), Professor (lectures) Olha Brovko, PhD (Economics), Associate professor (laboratory studies)
Teacher's contacts	olena.raev@gmail.com ol.iv.brovko@gmail.com
Days of the classes	According to the class schedule for the 2nd semester of 2020-2021 academic year
Consultations	According to the consultation schedule for the 2nd semester of 2020-2021 academic year

The purpose of the discipline is to study modern methods of decision support, research of current problems in decision-making in the activities of enterprises and organizations, acquiring skills to apply these methods in practice to develop and justify complex economic decisions

Prerequisites for learning

List of previously listened disciplines: mathematics for economists, microeconomics, macroeconomics, statistics, informatics, computer science. Knowledge, skills, abilities that the applicant must have to begin to study the discipline: basic knowledge of micro- and macroeconomics, statistics, be able to apply economic, statistical tools and methods, data search; data processing and have the skills to work in Microsoft Office applications (Word, Excel, PowerPoint).

Content of the educational discipline

Content module 1. Decision making methodology

Topic 1. The decision-making process, its principles and elements.

Topic 2. Methods and techniques for finding effective solutions

Topic 3. Economic and mathematical methods of decision making

Content module 2. Using modern methods of analytical data processing

Topic 4. Methods of evaluation of management decisions.

Topic 5. Business decision support systems. Data Driven Decision Making.

Material and technical support (software) of the discipline

Microsoft Office (Word, Excel, PowerPoint, Access), online resources, graphic editors and information visualization applications

Course page on the Moodle platform (personal training system)

<https://pns.hneu.edu.ua/course/view.php?id=7279>

Recommended literature

Main: 1. Балдин К. В. *Управленческие решения: Теория и технология принятия: [Учебник для вузов]* / Константин Васильевич Балдин , Сергей Николаевич Воробьев. – М.: Проект, 2004. – 304 с. 2. Гевко І. Б. *Методи прийняття управлінських рішень: [підручник для вузів]* / Іван Богданович Гевко. – К.: Кондор, 2009. – 186 с. 3. Горелова Г.В., Хлебникова А.И. *Когнитивное моделирование для интеллектуальной системы поддержки принятия решений управления транзитной*



торговлей // «Штучний інтелект». – № 3. – 2010. – с. 473-482. 4. Кушилик-Дивульська О.І., Кушилик Б.Р. *Основи теорії прийняття рішень*. – К., 2014. – 94с. 5. Лафта Д. К. *Управленческие решения: [Учебное пособие для вузов] / Джавад Кадем Лафта*. – М.: ООО фирма "Благовест-В", 2004. – 303 с. 6. Литвак Б. Г. *Разработка управленческого решения: [учебник для вузов] / Борис Григорьевич Литвак*. - 5-е изд., испр. и доп. – М.: Дело, 2004 . – 416 с. 7. Орлів М. С. *Підготовка і прийняття управлінських рішень : навч.-метод. матеріали / М. С. Орлів; упоряд. Г. І. Бондаренко*. – К. : НАДУ, 2013. – 40 с. 8. *Теорія прийняття рішень [текст] підручник. / за заг. ред. М. П. Бутка [Бутко М. П., Бутко І. М., Мащенко В. П. та ін.]* - К. : «Центр учбової літератури», 2015.-360 с.

Assessment system of learning outcomes

Assessment of the formed competencies of students is carried out according to the accumulative 100-point system, control measures include: the current control, carried out during the semester during lectures, laboratory classes, and estimated by the sum of the points scored (the maximum amount is 100 points; the minimum amount that allows the student to get a pass is 60 points); the final / semester control, conducted in the form of a pass, according to the schedule of the educational process. Pass implies the writing control work. The control work covers the program of discipline and involves determining the level of knowledge and the degree of mastery of competences by students.

More detailed information on assessment is given in the technological card of the discipline. <https://pns.hneu.edu.ua/course/view.php?id=4744>

Accumulation of rating points in the discipline

Types of training	Max points
Attending lectures	20
Protection of laboratory works	20
Seminar	15
Test tasks	15
Homework	5
Control work	25
Max points	100

Transference of Simon Kuznets KHNU 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	satisfactory	
64 – 73	D		
60 – 63	E	unsatisfactory	not pass
35 – 59	FX		
1 – 34	F		

Discipline policies

The policy of the discipline is built taking into account the current legislation of Ukraine and regulations 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 Simon 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=7279>

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