

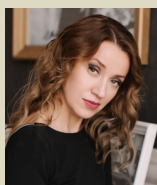
ECONOMC INFORMATICS

COURSE SYLLABUS

Code and name of specialty	073 – Management	Institute	Institute of Education and Science in Economics, Management and International Business
Program name	Management of Organizations and Administration / Business Administration (in English)	Department	Management
Type of program	Educational and Professional	Language of instruction	English / Ukrainian

LECTURER

Kateryna Sokol, kateryna.sokol@khpi.edu.ua



PhD in Economics, Associate Professor, Associate Professor of the Department of Economic Cybernetics and Marketing Management, NTU "KhPI". Experience more than 10 years. Author of more than 20 scientific and educational works on current economic issues. Course: "Economic Informatics"

GENERAL DESCRIPTION OF THE COURSE

Summary	The discipline is aimed at gaining theoretical knowledge in the field of computer science and acquiring skills in the application of applied data processing systems and programming systems for personal computers and local computer networks in the study of socio-economic systems and solving problems of professional orientation						
Course objectives	Study of theoretical bases of computer science and acquisition of skills of use of applied systems of processing of economic data and programming systems for personal computers.						
Types of classes and control	Lectures, practical classes, consultations. The course ends with a final exam.						
Term	2						
Student workload (credits) / Type of course	5 / Mandatory	Lectures (hours)	16	Practical classes (hours)	48	Self-study (hours)	86
Program competences	GC03. The ability to abstract thinking, analysis, synthesis. GC04. The ability to apply knowledge in practical situations. GC05. Knowledge and understanding the subject area and understanding the professional activity. GC08. Skills of information and communication technology usage. GC09. The ability to learn and to master modern knowledge.						
Learning outcomes	Teaching and learning methods			Forms of assessment (continuous assessment CAS, final assessment FAS)			

LO 04. To show skills of identification of problems and justification of management decisions.	Interactive lectures with presentations, discussions, practical classes, method of feedback from students	Practical tasks (CAS), assessment of knowledge in practical classes (CAS), online tests (CAS), exam (FAS)
LO 06. To show skills of search, collecting, and analysis of information, calculation of indicators to substantiate management decisions..	Interactive lectures with presentations, discussions, practical classes, method of feedback from students	Practical tasks (CAS), assessment of knowledge in practical classes (CAS), online tests (CAS), exam (FAS)
LO 16. To demonstrate skills of independent work, flexible thinking, openness to new knowledge, be critical and self-critical.	Interactive lectures with presentations, discussions, practical classes, method of feedback from students	Practical tasks (CAS), assessment of knowledge in practical classes (CAS), online tests (CAS), exam (FAS)

ASSESSMENT AND GRADING

	Total score (points) for all types of learning activities	ECTS grading scale	The national grading scale	Allocation of grade points	100% final assessment in the form of an exam (40%) and current assessment (60%). 40% exam: 2 theoretical questions and practical task 60% current rating: • 30% assessment of tasks in practical classes; • 30% intermediate control (2 online tests)
Ranges of points corresponding to grades	90-100	A	excellent		
	82-89	B	good		
	74-81	C			
	64-73	D	satisfactory		
	60-63	E			
	35-59	FX	Unsatisfactory (with the exam retake option)		
	0-34	F	Unsatisfactory (with mandatory repetition of the course)		

Course policy	The student is obliged to attend all classes on schedule, not to be late. Adhere to ethics of behavior. When skipping lectures, an oral interview is held on the topic. In order to master the required quality of knowledge in the discipline requires attendance and regular preparation for classes. Practical tasks must be submitted by the deadline. Without the personal presence of the student, the final control is not carried out.
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COURSE STRUCTURE AND CONTENT

Lecture 1	Economic informatics: methods and tasks	Practical classes 1-4	Microsoft Word - Formatting a document, working with lists, formulas	Self-study	History of computer science and computer technology Types of information, information systems Data structures
Lecture 2	Information management	Practical classes 5-6	Microsoft Word - Document formatting, working with macros, tables. drawings		PC classifications and generations Stages of information technology development
Lecture 3	Computer technology and software classification	Practical classes 7-9	Microsoft Power Point - Creating presentations, working with animation, notes, notes, hyperlinks		Algorithm and its properties Methods of algorithm development Description of the algorithm using algorithmic languages Stages of solving problems on a computer
Lecture 4	Modern systems for providing information	Practical classes 10-11	Microsoft Excel - Microsoft Excel window. work with data. addressing		Representation (encoding) of information in a computer The concept of information system

	processes			General properties and patterns of economic information
Lecture 5	Basics of computer networks. Internet	Practical classes 12-13	Microsoft Excel - Format cells, build and modify charts	Information activity of the economist Information modeling Information Technology Information resources and Information processes Information and management
Lecture 6	The use of the Internet in the economy	Practical classes 14-16	Microsoft Excel - Work with tables, databases, mathematical functions	Classification of information systems of enterprises The structure of the computer information system of enterprises Technical base of modern information technologies
Lecture 7	Information policy	Practical classes 17-19	Microsoft Excel - Working with financial, logical functions	New information technologies as the main means of informatization of society The role and place of information in modern society The main problems of the information society
Lecture 8	Organization of computer security and information protection	Practical classes 20-24	Microsoft Excel - Work with text functions, use time and date functions	World information market Formation and development of the information industry in Ukraine.

RECOMMENDED READING

C o m p u t e r y	<ol style="list-style-type: none"> 1. Massimo Ballerini, Alberto Clerici, Maurizio De Pra. Excel for students in economics and finance. Egea. 2020, p.206 2. Giovanni Romeo. Elements of Numerical Mathematical Economics with Excel. 1st Edition. Static and Dynamic Optimization. Academic Press, 2019. P. 816 3. Chiu Yu Ko Applied Financial Economics -- Programming: Excel, VBA and R, 2018. P. 267 4. Informatics in Economy. Ed. by Silaghi G.C., Buchmann R.A., Boja C.15th International Conference, IE 2016, Cluj-Napoca, Romania, June 2-3, 2016, Revised Selected Papers 5. Buultjens J. Excel HSC Economics. Pascal Press, 2011. P. 128 6. Ioan Gheorghe Ratiu. Informatics Applications in Economics. Lambert Academic Publishing, 2011. P. 200 7. Barrett M., Davidson E., Middleton C., DeGross J. Information Technology in the Service Economy:: Challenges and Possibilities for the 21st Century. Springer US, 2010. P. 388 8. IFIP Advances in Information and Communication Technology. Ed. by Barrett M., Davidson E., Middleton C., DeGross J. Springer US, 2010. P. 388 9. Information Technology and Economic Development. Ed. By Kurihara Yutaka, Takaya Sadayoshi, Harui Hisashi, Kamae Hiroshi, IGI Global, 2007, P. 404 	A d d i t i o n a l	<ol style="list-style-type: none"> 1. Кобилін А. М. Системи обробки економічної інформації : навчальний посібник / А. М. Кобилін . – Київ : Центр учбової літератури, 2019. – 234 с. 2. Мельникова О. П. Економічна інформатика : навчальний посібник / О. П. Мельникова. – Київ : Центр учбової літератури, 2019. – 424 с. 3. Нелюбов В. О. Основи інформатики. Microsoft Excel 2016 : навчальний посібник / В. О. Нелюбов, О. С. Куруца. Ужгород : Державний вищий навчальний заклад «Ужгородський національний університет», 2018. – 58 с 4. Проценко Н.М. Інформаційні технології: навч. посіб. Харків. СтильИздат. 2019. 125 с. 5. Економічна інформатика : навч. посібник / [П. М. Грицюк, В. І. Бредюк, В. Б. Василів та ін.]. - Рівне : НУВГП, 2017. - 311 с. 6. Економічна інформатика: навч. посіб. / В. А. Ткаченко, Г. Ю. Під'ячий, В. А. Рябик. – Харків : НТУ "ХПІ", 2011. – 312 с.: іл. 7. Макарова М.В., Гаркуша С.В., Білоусько Т.М., Гаркуша О.В. Економічна інформатика: підручник. К.: Університетська книга, 2017. 480 с Апатова Н.В. Інформатика для економістів : підручник / Н.В. Апатова, О.М. Гончарова, Ю.Ю. Дюлічева. – К. : Центр учбової літератури, 2011. – 456 с
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Academic integrity

Students are expected to adhere to the Code of Ethics of Academic Relations and Integrity of NTU "KhPI".

The content of this syllabus is consistent with the Economic Informatics course program.