

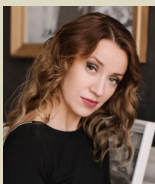
ECONOMC INFORMATICS

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	Economic Cybernetics and Marketing Management
Type of program	Professional	Language of instruction	English / Ukrainian

LECTURER

Kateryna Sokol, kateryna.sokol@kphi.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. Final control - exam.		
Term	2		

Student workload (credits) / Type of course	5 / Mandatory	Lectures (hours)	16	Pactical works (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)
-------------------	-------------------------------	--

LO04. Demonstrate skills to identify problems and justify 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)
LO16. 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

Ranges of points corresponding to grades	Total score (points) for all types of learning activities	ECTS grading scale	The national grading scale	Allocation of grade points
	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)	

100% final assessment in the form of an exam (40%) and current assessment (60%). 40% exam: 2 theoretical questions and laboratory task
60% current rating:
• 30% assessment of tasks in laboratory classes;
• 30% intermediate control (2 online tests)

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. Laboratory tasks must be submitted by the deadline. Without the personal presence of the student, the final control is not carried out.

COURSE STRUCTURE AND CONTENT

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

Lecture 5	Basics of computer networks. Internet	Practical classes 11-12	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 13-16	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 l s o r y	1. Massimo Ballerini, Alberto Clerici, Maurizio De Pra. Excel for students in economics and finance. Egea. 2020, p.206	R e c o m m e n d e d	1. Кобилін А. М. Системи обробки економічної інформації : навчальний посібник / А. М. Кобилін . – Київ : Центр учбової літератури, 2019. – 234 с.
	2. Giovanni Romeo. Elements of Numerical Mathematical Economics with Excel. 1st Edition. Static and Dynamic Optimization. Academic Press, 2019. P. 816		2. Мельникова О. П. Економічна інформатика : навчальний посібник / О. П. Мельникова. – Київ : Центр учбової літератури, 2019. – 424 с.
	3. Chiu Yu Ko Applied Financial Economics -- Programming: Excel, VBA and R, 2018. P. 267		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. 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		4. Проценко Н.М. Інформаційні технології: навч. посіб. Харків. СтильИздат. 2019. 125 с.
	5. Buultjens J. Excel HSC Economics. Pascal Press, 2011. P. 128		5. Економічна інформатика : навч. посібник / [П. М. Грицюк, В. І. Бредюк, В. Б. Василів та ін.]. - Рівне : НУВГП, 2017. - 311 с.
	6. Ioan Gheorghe Ratiu. Informatics Applications in Economics. Lambert Academic Publishing, 2011. P. 200		6. Економічна інформатика: навч. посіб. / В. А. Ткаченко, Г. Ю. Під'ячий, В. А. Рябик. – Харків : НТУ "ХПІ", 2011. – 312 с.: іл.
	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		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
	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		

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.