



## СИЛАБУС ДИСЦИПЛІНИ «ECONOMIC INFORMATICS»

**Ступінь вищої освіти - Bachelor**  
**Спеціальність 075 «Marketing»**  
**Освітня програма «07 Management and administration»**  
**Рік навчання 1, семестр 1**  
**Форма навчання денна**  
**Кількість кредитів ЄКТС 4**  
**Мова викладання англійська**

**Лектор курсу**

к.е.н, доцент кафедри інформаційних систем і технологій  
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**Сторінка курсу в eLearn**

<https://elearn.nubip.edu.ua/course/view.php?id=2749>

### ОПИС ДИСЦИПЛІНИ

The course "Economic Informatics" highlights the main principles and methods of applying modern information technologies in solving economic problems. The purpose of the course is to form in future professionals the necessary level of information and computer culture, the acquisition of practical skills in PC and the use of modern information technology to solve various problems in the process of learning and working in the specialty. The acquired skills of working on a personal computer with an operating system and major software packages such as MS Word, MS Power Point, MS Excel and online systems will enhance the performance of the tasks by future specialists.

**The course provides the formation of a number of general and program competencies:**

*General Competences (GC)*

GC 8 Skills in the use of information and communication technologies.

GC 10. Ability to conduct research at the appropriate level.

*Program Competences (PC)*

PR 21. Demonstrate the ability to use information and communication technologies to search, process, analysis and use of information from various sources.

### СТРУКТУРА КУРСУ

Тема	Години (лекції/ Лабораторні)	Результати навчання	Завдання	Оцінювання
<b>Module 1 Theoretical basis of economic informatics</b>				
<b>Topic 1. Theoretical basics of economic informatics</b>	2/6	To know the role and place of IT in human life. Data, their types and structure. To understand what is Information, its types and quantitative dimension. To know the difference between information technology (IT) and information system (IS). Stages of development of IT. Industry and market IT. To be able of classification of economic information. To know the latest trends in IT, main directions of computer science development.	Tasks of laboratory works. Independent work. Answers to questions	<b>10</b>

		To know the value of computer technology in improving the efficiency of the agro industrial complex of Ukraine.		
<b>Topic 2. Basic characteristics of hardware and software</b>	2/4	To know the theoretical foundations and hardware of a personal computer, systems for calculating and encoding information. To be able of characterization of computer devices: processor, memory, monitor and keyboard. To analyze the specifications (PCs and components). To be able of configuring the operating system and data management skills in the Windows environment. Data management: create, move, delete directories; create, move, delete files. Compress and save files. Network office. Working with Google Apps. Introduction to the principles of the work of the network office. Overview of Google Apps Types and Features. Create and collaborate on editing Google documents and acquiring hands-on collaborative calendar skills.	Tasks of laboratory works. Independent work. Answers to questions	<b>15</b>
<b>Topic 3. Formats of electronic documents</b>	2/6	To know the basic rules for working with the presentation and basics of working with data presentation technology. Creating illustrative material with desktop publishing tools and developing an animation movie using MS PowerPoint. To be able to create illustrative material for printing. Overview of types of advertising illustrative materials and programs for their creation. Create an illustrative booklet with desktop publishing tools, as an example for MS Publisher. To know the basic principles of work with raster graphics. Tricks for creating and editing illustrative material using graphic editors (for example, Photoshop online). Opportunities and rules for working with layers.	Tasks of laboratory works. Independent work. Answers to questions	<b>15</b>
<b>Topic 4. Basics of working with text documents in MS Word</b>	2/4	To know how to create business documents having various graphics including pictures, charts, and diagrams. Using styles and auto text elements in text documents. Formatting structured documents and working with non-text objects. Structuring the finished text by sections and subdivisions. Numbering of pages. Formation of automatic content. Working with tables. Create and remove tables. Edit the table. Formatting tables. Calculations in the table. Creating Formulas. Editing formulas. Placement of formulas in the text.	Tasks of laboratory works. Independent work. Answers to questions	<b>15</b>

		Tables and charts in MS Word. Insert chart and graph documents. Editing charts. Types of charts. Insert pictures. Import graphic objects. Create an organizational chart. Edit organizational chart.		
<b>Module 1 (practical assignment, quiz)</b>	<b>0/2</b>		Practical assignment and final test in the electronic course	<b>45</b>
<b>Module 2 Introduction to spreadsheets of MS Excel</b>				
<b>Topic 5. Introduction to MS Excel</b>	2/6	To know the main tools of spreadsheet toolbars, moving to worksheet, cell ranges, rows, columns, data entry. To know the difference between absolute and relative cell references. Entering sequences of numbers, dates and text. Using AutoFill. Format cells: number format, alignment, frame creation and background fill. Mathematical operators. To know how to How to Add, Subtract, Multiply, Divide in Excel. Date and time formula. Errors in formulas. Replacing the formula with its calculated value. To be able to create different types of formulas. To know how to create of graphics from one variable $y = f(x)$ and from two variables $z = f(x, y)$ . Use of the built-in functions.	Tasks of laboratory works. Independent work. Answers to questions	<b>15</b>
<b>Topic 6. Functions of MS Excel</b>	2/8	To understand the logical and financial functions (operators) and conditions in MS Excel. Use logical functions when their values are text based on certain conditions. Calculation of values of logic functions with four and more conditions. Visualizing data using charts in Excel	Tasks of laboratory works. Independent work. Answers to questions	<b>15</b>
<b>Topic 7. «Data Analysis», «Pivot tables» and «Solver» tools in MS Excel</b>	3/7	To be able how to create Pivot Table in MS Excel. The main features of the Pivot tables in MS Excel. Objects of the Pivot tables. Organization of the database. Create lists. Data entry. Search records. Arranging records. Using Auto Filter. Using AutoFormat. Advanced filter. Functions for working with databases. Generation of consolidated tables. Data consolidation. To know how to automate the execution of procedures in MS Excel by creating macros and applying a package of analysis for financial and scientific data.	Tasks of laboratory works. Independent work. Answers to questions	<b>25</b>
<b>Module 2 (practical assignment, quiz)</b>	<b>0/2</b>		Practical assignment and final test in the electronic course	<b>45</b>
<b>Всього за семестр</b>				<b>70</b>
<b>Екзамен</b>				<b>30</b>
<b>Всього за курс</b>				<b>100</b>

## ПОЛІТИКА ОЦІНЮВАННЯ

<b><i>Політика щодо дедлайнів та перескладання:</i></b>	Роботи, які здаються із порушенням термінів без поважних причин, оцінюються на нижчу оцінку. Перескладання модулів відбувається із дозволу лектора за наявності поважних причин (наприклад, лікарняний).
<b><i>Політика щодо академічної доброчесності:</i></b>	Списування під час контрольних робіт та екзаменів заборонені (в т.ч. із використанням мобільних девайсів). Курсові роботи, реферати повинні мати коректні текстові посилання на використану літературу
<b><i>Політика щодо відвідування:</i></b>	Відвідування занять є обов'язковим. За об'єктивних причин (наприклад, хвороба, міжнародне стажування) навчання може відбуватись індивідуально (в он-лайн формі за погодженням із деканом факультету)

## ШКАЛА ОЦІНЮВАННЯ СТУДЕНТІВ

Рейтинг здобувача вищої освіти, бали	Оцінка національна за результати складання екзаменів заліків	
	екзаменів	заліків
90-100	відмінно	зараховано
74-89	добре	
60-73	задовільно	
0-59	незадовільно	не зараховано