

**NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES  
OF UKRAINE**

Department of Entrepreneurship organization and Exchange Activities



**"APPROVED"**

Dean of Economic Faculty

Anatolii Dibrova

"20" may 2022

**"Considered and Approved"**

Department of Entrepreneurship organization  
and Exchange Activities

Mykola Ilchuk

Protocol № 16

«12» may 2022

**"Considered"**

Guarantor of the educational  
and professional program «Finance and credit»

Yuliia Nehoda

***WORKING EDUCATIONAL PROGRAM***

**BASICS OF EXCHANGE ACTIVITY**

Specialty 072 «Finance banking and insurance»

Educational  
and professional program «Finance and credit»

Faculty Economic

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KYIV – 2021

1. Description of the course  
**BASICS OF EXCHANGE ACTIVITY**

<b>Industry of knowledge, specialty, educational program, educational level (EL)</b>		
<b>Industry of knowledge</b>	<u>07 Management and administration</u>	
<b>Specialty</b>	072 Finance, banking and insurance	
<b>Educational program</b>	«Finance and credit»	
<b>EL</b>	<b>“Bachelor”</b>	
<b>Description of the course</b>		
Type of Discipline	Selective	
Total number of hours	<u>120</u>	
Number of credits ECTS	<u>4</u>	
Number of modules	<u>2</u>	
Course project (work) (if available in your curriculum)		
Form of control	Exam	
<b>Descriptions of the course for full-time and distance learning</b>		
	<b>full-time</b>	<b>external form</b>
Year of training	<u>3</u>	<u>          </u>
Semester	<u>6</u>	<u>          </u>
Lectures	<u>30</u> hours	<u>          </u> hours
Practical work	<u>30</u> hours	<u>          </u> hours
Laboratory work	<u>          </u> hours	<u>          </u> hours
Independent work	<u>60</u> hours	<u>          </u> hours
Individuals work	<u>          </u> hours	<u>          </u> hours
Number of weekly hours for full-time study:	<u>4</u> hours	

## **2. Purpose, objectives and competencies of the course**

**The purpose of the course " BASICS OF EXCHANGE ACTIVITY "** is to give the future specialist in finance the theoretical basics and practical skills in exchange activity organizing and effective use of exchange operations in their future activity.

**The tasks of the course supposed to accomplish the next interrelated goals:** comprehending the theoretical fundamentals of commodity exchange market functioning and receiving the practice in organizing the futures trade.

During the conducting of educational training the main attention is paid to extending the student's knowledge in exchange activity and using this" knowledge on the exchange and for improving the efficiency of manufacturing and selling the agricultural products. The participation in trade on the commodity exchange as well as through the computer modeling of trade, carrying out of calculations on the examples of enterprises, firms and other economic units are used to strengthen the students' knowledge.

**The main forms of studying the course are: lectures, practical works, business games, educational training.**

**Visual materials:** foreign and domestic films on appropriate subjects, technical facilities are used to intensify the educational process.

### **After the course students should know:**

- regulations and laws;
- principles of commodity exchange organization activity and mechanics of their functioning;
- process of carrying out the commodity and stock exchange operations and determination of their efficiency;
- methods of financial and economic analysis and usage of information technologies of currency and stock market on the working place;
- ethical principles of commodity exchange market functioning.
- instruments of Futures market.
- hedging strategies.

### **On the basis of received knowledge the students will be able to:**

- easily use the exchange information for carrying out the business transactions;
- organize brokerage firm and assure its normal functioning;
- work as a broker on the commodity, stock and currency exchanges;
- organize sale of financial instruments through the exchange market;

- use quotes and information materials of the exchanges during making' the business plan with the purpose of production effective organizing;
- use future market to insure against the price volatility, manage the enterprise assets and receive the credits on the security of futures and forward contracts in practice.

**Fulfillment of practical works and calculations concerning the next issues:**

- modeling of futures trade;
- preparing the necessary documents for the registration of brokerage house;
- mastering the hedging practice using futures and options;
- processing and execution of exchange deals.

Calculations on carrying out the commodity exchange deals, hedging using futures and options on indices, securities, currency enable the students to master the theoretical knowledge and receive the skills in practical activity as to usage of exchange market with the purpose of protection from unpredictable price movements and receiving the profits.

**Acquisition of competencies:**

**- general competencies (GC):**

GC 1. Ability to abstract thinking, analysis and synthesis.

GC 2. Ability to apply knowledge in practical situations.

GC 3. Ability to plan and manage time.

GC 6. Ability to conduct research at the appropriate level

GC 8. Ability to search, process and analyze information from various sources

professional (special) competencies (SC):

SC 1. Ability to study trends in economic development using the tools of macro- and microeconomic analysis, to assess current economic phenomena.

SC 3. Ability to diagnose the state of financial systems (public finance, including budget and tax systems, business finance, household finance, financial markets, banking system and insurance).

SC 6. Ability to use modern information and software to obtain and process data in the field of finance, banking and insurance.

### **3. Program and Structure of the course**

#### **Module 1. Theoretical principles of organization of exchange activity**

**Topic 1. Introduction to the commodity futures trading.** Evolution of exchange activity. Characteristics of the local market. Characteristics of the fair. Auction characteristics. Characteristics of exchange trade. History of exchange trade development in the world. The first commodity exchanges. The first transactions with securities on world stock exchanges. The current state of the international stock market.

**Topic 2. Functions of commodity futures trading.** The essence of futures trading. The role and place of exchange trading in the market system. Classic functions of the modern stock exchange. The concept of stock exchange transaction. Types of exchange transactions. Futures contract. History of futures contracts in the world. The first futures on the Chicago Board of Trade.

**Topic 3. Commodity futures markets: their mechanics and price relationships.** Organizational structure of the futures markets. Exchange management. General meeting and their powers. Organization of concluding and executing exchange transactions. Technologies of exchange trade on world exchanges. Simple auction and its types. Open outcry system of trading. Exchange members. Stock brokers. Full membership. Part membership.

**Topic 4. The commodity futures contract.** The concept of futures contract. Futures contract specifications. Types of underlying assets. Futures for agricultural products. Exchange rate futures. Futures on stock indices. Pricing of futures contracts. Types of futures prices. Normal market. Backwardation. Forwardation. Futures price tendention. Bulls and Bears.

#### **Content module 2. Organization and technologies of exchange futures trading.**

**Topic 5. The clearinghouse.** The concept of clearing. Stock exchange clearing. Clearing House. Ways to close futures contracts. Guaranteeing the execution of exchange transactions. Margin. Types of margins. Initial margin. Maintenance margin. Variation margin. Margin contributions. Net - principle margin calculation. Gross - margin principle calculation.

**T.6 Hedging fundamentals.** The essence of hedging. Hedging as the main method of price risk management. History of hedging. Risks and their types. Price risks and mechanisms for their minimization. The concept of "perfect hedging" and its application. Practical application of hedging in organized markets. The concept of "hedging strategy". Futures hedging research in international practice. The role of futures trading in the development of hedging strategies. Features of the use of futures on agricultural assets in hedging strategies. Long hedge strategy. Short hedge strategy.

**T.7 Speculation strategies.** The concept of speculation. The concept of stock trading. The role and functions of speculators in the stock market. Advantages and disadvantages of stock speculation. Types of speculative strategies. Combining speculative and hedge strategies.

Titles and content of modules	Hours												
	Full-time							External form					
	weeks	total	including					total	including				
			lec	prac	lab	Ind	idep		lec	pr a c	lab	Ind	idep
1	2	3	4	5	6	7	8	9	10	11	12	13	14
<b>Module 1. Theoretical principles of organization of exchange activity.</b>													
T1. Introduction to the commodity futures trading.	1	19	2	2			15						
T.2 Functions of commodity futures trading	3	14	2	2			10						
T.3 Commodity futures markets: their mechanics and price relationships	4	14	2	2			10						
T.4 The commodity futures contract	5	14	2	2			10						
Total hours		61	8	8			45						
<b>Module 2. Organization and technologies of exchange futures trading.</b>													
T.5. The clearinghouse	4	14	2	2			15						
T.6 Hedging fundamentals	5	21	2	4			15						
T.7 Speculation strategies	6	14	2	2			15						
Total hours		59	6	8			45						
<b>Total for course</b>		<b>120</b>	<b>14</b>	<b>16</b>			<b>120</b>						

**4. Seminars**  
(not provided)

## 5. Topics of practical works

№	Title	Hours
1	Introduction to the commodity futures trading.	2
2	Functions of commodity futures trading	2
3	Commodity futures markets: their mechanics and price relationships	2
4	The commodity futures contract	2
5	The clearinghouse	2
6	Hedging fundamentals	4
7	Speculation strategies	2
	<b>Total</b>	<b>16</b>

## 6. Laboratory works (not provided)

## 7. Control questions, example of tests:

1. The preconditions of commodity exchange trading evolution.
2. Historical stages of commodity trading development.
3. The modern state of international and domestic commodity exchange trading.
4. Emergence of Organized Markets.
5. Evolution of exchange activity.
6. Characteristics of the local market.
7. Characteristics of the fair.
8. Auction characteristics.
9. Characteristics of exchange trade.
10. History of exchange trade development in the world.
11. The first commodity exchanges.
12. The first transactions with securities on world stock exchanges.
13. The current state of the international stock market.
14. Major Commodity Exchanges in the world.
15. Forward Contracts Versus Futures Contracts.
16. Risk shifting or hedging on futures markets.
17. Price discovery.
18. Influence of futures trading on cash prices.
19. The biggest world exchanges.
20. The essence of forward contract.
21. The essence of futures contract.
22. Functions of Futures Markets.
23. How futures trading provide price discovery mechanism.
24. Futures contract specification.
25. Functions of futures trading.
26. The role and place of exchange trading in the market system.
27. Classic functions of the modern stock exchange.
28. The concept of stock exchange transaction.
29. Types of exchange transactions.

30. History of futures contracts in the world.
31. The first futures on the Chicago Board of Trade.
32. Technologies of futures trading.
33. Open price. Closing price.
34. Settlement price.
35. Lifetime high.
36. Lifetime low.
37. Open interest.
38. Volume of trading.
39. Short position.
40. Long position.
41. Contango.
42. Backwardation.
43. The essence of clearing.
44. The essence of clearing house.
45. Functions of The clearing house.
46. Stock exchange clearing.
47. Ways to close futures contracts.
48. Guaranteeing the execution of exchange transactions.
49. Margin.
50. Types of margins.
51. Initial margin.
52. Maintenance margin.
53. Variation margin.
54. Margin contributions.
55. Net - principle margin calculation.
56. The Gross basis. The net basis.
57. The essence of hedging.
58. Hedging as the main method of price risk management.
59. History of hedging.
60. Risks and their types.
61. Price risks and mechanisms for their minimization.
62. The concept of "perfect hedging" and its application.
63. Practical application of hedging in organized markets.
64. The concept of "hedging strategy".
65. Futures hedging research in international practice.
66. The role of futures trading in the development of hedging strategies.
67. Features of the use of futures on agricultural assets in hedging strategies.
68. Long hedge strategy.
69. Short hedge strategy.
70. The difference between hedger and speculator.
71. What does it mean price risk?
72. Basis. How to calculate basis.
73. Long hedging. Short hedging.
74. The essence of speculation.
75. Speculation strategies.
76. Types of speculators.
77. Fundamental analysis.
78. Technical analysis.
79. Day-trading.

### **Tests:**



**1. Indicators of stock exchange market conditions are:**

- 1) securities;
- 2) indicators of the level of supply and demand in the market;
- 3) profitability indicators;
- 4) correct answer 1, 2.

**2. The study of market conditions involves:**

- a) analysis and sales pricing;
- b) determination of market potential and market share;
- c) development of short-term and long-term forecast;
- d) all answers are correct.

**3. Is it true that the stock exchange market is a regularly functioning wholesale market of homogeneous goods sold according to samples (standards)?**

- a) yes;
- b) no.

**4. According to the territorial location of the exchange it is accepted to distinguish on:**

- 1) local, national;
- 2) local, national, interregional, international;
- 3) no correct answer
- 4) correct answer 2.

**5. The stages of studying the stock market situation are carried out in the following sequence:**

- 1) current monitoring of the general market situation; current monitoring of bidding on selected assortments; development of methods for studying the situation; collection and accumulation of market information, market analysis;
- 2) current monitoring of bidding for selected ranges; development of methods for studying the situation; collection and accumulation of market information, market analysis; market forecasting;
- 3) development of methods for studying the situation; collection and accumulation of market information, market analysis; market forecasting; current monitoring of the general market situation;
- 4) current monitoring of the general market situation; current monitoring of bidding on selected assortments; development of methods for studying the situation; collection and accumulation of market information, market analysis; market forecasting.

**6. The analysis of the stock exchange market situation on the basis of dynamic indicators is carried out on:**

- 1) the dynamics of supply and demand;
- 2) the dynamics of transactions;
- 3) price dynamics;
- 4) all answers are correct.

**7. In exchange practice there is no such type of fluctuation as:**

- 1) short-term;
- 2) long;
- 3) medium-term;
- 4) long-term.

**8. The market in which the purchase and sale of securities are carried out outside the premises of the exchange are:**

- 1) primary;
- 2) urgent;

- 3) organized;
- 4) OTC.

**9. Specify the correspondence of the figures of technical analysis with their concept:**

- |                               |                                    |
|-------------------------------|------------------------------------|
| 1) reversible figure          | A) continuation of the price trend |
| 2) the figure of continuation | B) change in the price trend       |

**10. Which of the following statements is correct?**

- a) Bullish trend = Price down
- b) Bullish trend = Price up
- c) Bearish trend = Price up

**11. The effect of speculation is to:**

- A. Increase price fluctuations
- B. Alter supply to demand forces
- C Reduce farmer risk in growing his crop
- D. Reduce range of cash price fluctuation

**12. The major distinction between cash and futures contracts is:**

- A. Offset procedure
- B. To-arrive provisions
- C Inspection procedures
- D. Commodity grade

**13. The concept of futures trading was used in Europe long before U.S. markets were developed:**

- A. True
- B. False

**14. A cash forward sale is essentially the same as a futures contract with the major difference being the ability to offset in futures:**

- A. True
- B. False

**15. Cash forward and futures contracts differ in that:**

- A. The latter are traded on organized exchanges, but the former need not be
- B. Futures contracts are standardized and cash forward contracts are frequently negotiated
- C. Futures can be more easily offset
- D. All of the above.

**16. The motive of the speculator is profit:**

- A. True
- B. False

**17. The efficiency of a market is most influenced by:**

- A. The number of traders
- B. The weather
- C. The availability of cash supplies
- D. The amount of margin requirements

**18. If you're interested in protecting yourself against rising prices, you can**

- A. Go “long” futures
- B. Go “short” futures
- C. Go “long” cash
- D. Go “short” cash

**19. To place a hedge, you need:**

- A. to contact a broker with whom you place an order
- B. to contact a clearing member with whom you place an order
- C. to go on otc-market

**20. On the purchase or sale of a futures contract, transfer of ownership is not accomplished unless:**

- A. 50 percent of the cash value of the contract has been deposited
- B. The commodity position is offset
- C The commodity is actually delivered
- D. It is done via a regulated commodity exchange

**21. The cash market and the nearest futures contract tend to converge:**

- A. At the country elevator
- B. At the end of the month
- C At terminal markets
- D. During the delivery month

**22. If a futures contract is offset, delivery is required immediately:**

- A. True
- B. False

**23. If a farmer wants to hedge his crop, he would buy futures:**

- A. True
- B. False

**24. The most important function of a futures market is:**

- A. Forward pricing
- B. Attracting speculators
- C Assembling, standardizing, and grading
- D. Eliminating all risk

**25. About 98 percent of all futures contracts are satisfied by offset and not delivery:**

- A. True
- B. False

## **8. Teaching Methods**

Teaching methods are ways of joint activity and communication of teachers and graduates, providing positive motivation for learning, mastering the system of professional knowledge, skills and abilities, formation of scientific worldview, development of cognitive forces, culture of mental work of future professionals.

The following teaching methods are used during the learning process:

- lectures (explanations, discussions, demonstrations);
- practical classes (practical cases, discussions, round tables, practical tasks);

- independent work (individual tasks, presentation preparation).

Application of problem-based learning methods and distance learning technologies.

## 9. Forms of control

According to the "Regulations on exams and tests in NULES of Ukraine" approved by the Academic Council of NULES of Ukraine from 27.12.2019, the types of control of knowledge of higher education seekers are the current control, intermediate and final certification.

*Current control* is carried out during practical, laboratory and seminar classes and aims to check the level of readiness of higher education students to perform specific work.

*Intermediate certification* is carried out after studying the program material of each content module. The teaching material of the disciplines taught during one semester - autumn or spring, is divided by lecturers into two or three content modules.

The final control in the course "Basics of exchange activity" is conducted in the form of a semester exam.

The mastering by the applicant of higher education of the program material of the content module is considered successful if its rating is not less than 60 points on a 100-point scale.

## 10. Розподіл балів, які отримують студенти.

Оцінювання знань студента відбувається за 100-бальною шкалою і переводиться в національні оцінки згідно з табл. 1 «Положення про екзамени та заліки у НУБіП України» (наказ про уведення в дію від 27.12.2019 р. № 1371)

**Таблиця 1.**

Співвідношення між рейтингом здобувача вищої освіти і національними оцінками

Рейтинг здобувача вищої освіти, бали	Оцінка національна результати складання		за
	екзаменів	заліків	
90-100	Відмінно	Зараховано	
74-89	Добре		
60-73	Задовільно		
0-59	Незадовільно	Не зараховано	

Для визначення рейтингу студента (слухача) із засвоєння дисципліни  $R_{\text{дис}}$  (до 100 балів) одержаний рейтинг з атестації (до 30 балів) додається до рейтингу студента (слухача) з навчальної роботи  $R_{\text{нр}}$  (до 70 балів):  $R_{\text{дис}} = R_{\text{нр}} + R_{\text{ат}}$ .

## 11. Methodological Support

1. Elearn: URL: <https://elearn.nubip.edu.ua/course/view.php?id=1852>

2. Методичні вказівки для самостійного вивчення дисципліни «Основи біржової діяльності» / І.В.Охріменко Київ: АграрМедіаГруп, 2016. 20 с.

3. Методичні вказівки до проходження навчальної та виробничої практик з дисциплін «Основи біржової діяльності» та «Біржовий ринок» / [М.О.Солодкий, В.О.Яворська та ін.]. Київ: Компрінт, 2017. 34 с.

## **11. Recommended Sources**

### **Basic**

1. Солодкий М.О., Резнік Н.П., Яворська В.О. Основи біржової діяльності: навч. посібник для студентів вищих навчальних закладів / за ред. М.О. Солодкого Київ: Компрінт, 2017. 450 с.

2. Солодкий М.О. Біржовий товарний ринок: навчальний посібник/ М.О. Солодкий. Київ: Компрінт, 2017. 576с.

3. Солодкий М.О., Яворська В.О. Міжнародні біржові ринки: навч. посібник для студентів вищих навчальних закладів / за ред. М.О. Солодкого Київ: Компрінт, 2019. 520 с.

4. Розвиток біржового ринку в умовах глобалізації/ М.О.Солодкий, В.О.Яворська, А.С. Кравченко. Київ: ЦП Компрінт, 2016. 356с.

5. John Hull. Options, Futures and Other Derivative Securities. 11-edition- New Jersey, University of Toronto, Prentice Hall, Englewood Cliffs, 2019. 852p.

### **Edditional**

1. Брокерська діяльність: посібник / М.О. Солодкий, Т.Ю. Андросович, В.О. Яворська, Ю.В. Рубан Київ: ЦП Компрінт 2013. 125 с.

2. Башинський І.А. Біржове право: навч. посіб. / Башинський І.А., Діденко С.В., Миронова В.О. Херсон: Чуєв С.М., 2014. 291 с.

3. Діброва А.Д., Рябченко О.О. Соціальні мережі – індикатор нелінійного аналізу для дослідження біржових ринків. Моніторинг біржового ринку. 2014. № 2 (21). С. 15-17.

4. Міжнародний фондовий ринок: навч. посіб.-практикум / [О.Є.Кузьмін та ін.]. Львів: Вид-во Львів. політехніки, 2015. 334 с.

5. Основи біржової діяльності: посібник для студентів вищих навчальних закладів / М.О. Солодкий, С.А. Стасіневич, Т.Ю. Андросович. Київ: ВЦ НУБіП України, 2013. 210 с.

6. Опционы. Максимальная прибыль при заданном риске. Киев: Украинская биржа. 2014. 28 с.

7. Основы интернет-трейдинга. Киев: Украинская биржа. 2014. 34 с.

8. Основы срочного рынка. – Киев: Украинская биржа. 2014. 30 с.

9. Солодкий М.О. Біржовий ринок: навчальний посібник/ М.О. Солодкий. Київ: Аграрна освіта, 2010. 565с.

10. Солодкий М.О., Яворська В.О., Андронович Т.Ю. Розвиток біржового аграрного ринку: монографія. Київ: ЦП Компрінт, 2014. 341с.

11. Солодкий М.О. та ін, всього 5 авторів. Біржовий ринок: проблеми функціонування та тенденції інноваційного розвитку: Монографія. Київ: ЦП Компрінт, 2013. 215 с.
12. Яворська В.О. Механізм хеджування на біржовому товарному ринку. Приазовський економічний вісник. 2019. Випуск № 3(14)URL: <http://www.rev.kpu.zp.ua/vypusk-3-14>.
13. Яворська В.О., Солодкий М.О. Біржовий ринок в умовах глобалізації: стан та перспективи розвитку. Інфраструктура ринку. 2019. Випуск № 31. URL: <http://www.market-infr.od.ua/31-2019>.
14. Яворська В.О., Грінченко В., Листопад В. Розвиток міжнародних біржових ринків. Східна Європа. Економіка, бізнес та управління. Випуск № 6(23). URL: <http://www.easterneurope-ebm.in.ua/index.php/2019>.
15. Фондовий ринок в Україні / Дегтярьова Н.В., Леонов Д.А., Січевлюк В.А. та ін. Київ.: УІРФР, 2015. 600 с.
16. Trading on Canadian Futures Markets. Fifth Edition by John E. Hore. Toronto, The Canadian Securities Institute, 2008. 196p.
17. Farming Futures. A guide to the agricultural commodity futures markets. -Cambridge, CHRISTOPHER PRIOR-WILLEARD, 2004. 126p.

## **12. Informational Resources**

1. Електронні та друковані видання бібліотеки ім. Вернадського URL: [www.nbuv.gov.ua](http://www.nbuv.gov.ua)
2. Аналітичне видання. Журнал Інтернет-трейдинг (Бібліотека кафедри )
3. Аналітичне видання. Журнал Біржовий моніторинг (бібліотека кафедри)
4. Верхован Рада України. URL: [www.rada.gov.ua](http://www.rada.gov.ua).
5. Державна служба статистики України. URL: [www.ukrstat.gov.ua](http://www.ukrstat.gov.ua)
6. Комісія з товарної ф'ючерсної торгівлі США. URL: [www.cftc.gov](http://www.cftc.gov).
7. Чиказька товарна біржа. URL: [www.cme.com](http://www.cme.com).
8. Міжнародна асоціація своп дирелів. URL: [www.isda.org](http://www.isda.org).