



COURSE SYLLABUS

«SYSTEMS OF TECHNOLOGIES: CROP PRODUCTION»

Degree of higher education - Bachelor
Specialization 075 Marketing

Educational programme «Marketing»

Academic year 1, semester 1

Form of study __ full-time

Number of ECTS credits __ 2.4 (4) __

Language of instruction English

Lecturer of the course
Contact information of the lecturer (e-mail)

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Course page on eLearn

<https://elearn.nubip.edu.ua/course/view.php?id=459>

COURSE DESCRIPTION

(up to 1000 printed characters)

The main purpose of the discipline is to provide knowledge and skills for the rational selection and effective application of various technological elements aimed at increasing crop productivity, reducing production costs, and enhancing the competitiveness of the obtained agricultural products. The key tasks include acquiring practical skills in producing high-quality, environmentally friendly products with minimal energy and labor costs while maximizing the output per unit of time and unit of area. This requires wide implementation of variety-based, intensive, energy- and resource-efficient, and environmentally sustainable technologies. It also involves the ability to align the cultivation of agricultural crops with market demands. The discipline covers theoretical foundations of occupational safety, legal aspects of occupational safety for workers in plant production, safety techniques in plant production, and fire safety in plant production.

Competencies of the educational programme:

Integrative competency (IC): _ The ability to solve complex specialized tasks and practical problems in the field of marketing or during the learning process, which involves the application of relevant theories and methods, and is characterized by complexity and uncertainty of conditions.

General competencies (GC):

GC4. The ability to learn and acquire contemporary knowledge.

GC5. Determination and perseverance in achieving set goals and fulfilling responsibilities.

GC11. The ability to work in a team.

GC13. The ability to work in an international context.

Professional (special) competencies (PC):

PC 7. The ability to substantiate, present, and implement research findings in the field of marketing.

Program learning outcomes (PLO) of the educational programme: __

PLO 5. The ability to identify and analyze key characteristics of marketing systems at different levels, as well as the behaviors of their subjects.

PLO 9. The ability to evaluate risks in conducting marketing activities, determine the level of uncertainty in the marketing environment when making management decisions.

PLO 11. Demonstrating the ability to apply an interdisciplinary approach and perform marketing functions of a market entity.

PLO 13. Being accountable for the results of one's activities and demonstrating entrepreneurial and managerial initiative.

PLO 26. Preparing founding documents and registering a business, taking into account the specifics of different organizational and legal forms of economic activity in accordance with current legislation.

COURSE STRUCTURE

Topic	Hours (lecture/laboratory, practical, seminar)	Learning outcomes	Tasks	Assessment
Semester 1				
Module 1 Features and prospects of using marketing tools in crop production.				
Topic 1: Plant science as a discipline and branch of agriculture. The state of modern crop production in Ukraine and the world.	2/2	To know about the current state and prospects for the development of the agriculture sector; the importance, distribution, morphological and biological characteristics of agricultural crops; modern technologies for growing field crops and peculiarities of their implementation in soil-climatic zones of Ukraine; ways to improve the quality of agricultural products; sources of expenses for growing agricultural crops and ways to optimize them.	Submitting laboratory work. Completing independent work (including in eLearn) Pass module control (more than 60 % of maximum points is a check point)	35
Topic 2. Cereals is a basis of crop production	2/2			
Topic 3. Organizational principles of effective winter wheat cultivation.	2/2			
Topic 4. Early and late spring cereals – organizational principles of effective cultivation	2/2			
Topic 5. Legumes. Management in cultivation technologies of peas and soybean	2/2			
Module 2. Organization of cultivation of industrial crops (raw materials) for processing industry.				
Topic 6. Tuber crops. general characteristics features at management of production	2/2	To be able to plan and organize the implementation of technological processes in agriculture; to apply innovative elements in crop cultivation technologies; to program crop yields for agricultural crops; to plan the production of high-quality, ecologically safe products with minimal energy costs per unit of output; to prevent yield losses during cultivation, harvesting, and storage; to use operational information for timely and high-quality implementation of	Submitting laboratory work. Completing independent work (including in eLearn) Pass module control (more than 60 % of maximum	35
Topic 7. Root crops. Sugar beets is a main raw material for sugar production	2/2			
Topic 8. The place of oil crops in Ukraine and the	2/2			

world. Choosing a crop and management in its cultivation		complex agricultural work. To distinguish between crops and the products obtained from them. To use acquired knowledge and skills in production during internships and other practical experiences	points is a check point)	
Topic 9. Sunflower and rapeseed - the main oil crops of Ukraine and the world	2/2			
Total for 1 semester	18/18			70
Exam				30
Total for course				100

ASSESSMENT POLICY

<i>Policy regarding deadlines and resits:</i>	<ul style="list-style-type: none"> • Tasks must be submitted on time, according to the delivery schedule. • Penalty for delay: <ul style="list-style-type: none"> - 10% – less 1 month - 20% – more 1 month • Re-assessment will be allowed if you pass all tasks in module
<i>Academic honesty policy:</i>	Plagiarism and re-delivery tasks don't allow
<i>Attendance policy:</i>	Attendance is mandatory. For objective reasons (for example, illness, international internship) training can take place individually (in online form in consultation with the dean of the faculty)

SCALE OF ASSESSMENT OF STUDENT KNOWLEDGE

Student rating, points	National grade based on exam results	
	exams	credits
90-100	excellent	passed
74-89	good	
60-73	satisfactory	
0-59	unsatisfactory	not passed

RECOMMENDED SOURCES OF INFORMATION

1. CROP PRODUCTION GUIDE AGRICULTURE. Tamil Nadu Agricultural University. 2020. Link: <https://www.freebookcentre.net/biology-books-download/gotoweb.php?id=13855>
2. Graham Thiele, Michael Friedmann, Hugo Campos, Vivian Polar, Jeffery W. Bentle. Root, Tuber and Banana Food System Innovations. Springer, 2022. DOI: <https://doi.org/10.1007/978-3-030-92022-7>
3. Kalenska S., Dmytrishak M., Antal T., Mazurenko B., M. Я. Crop production with basis of fodder production, Kyiv, 2021. [In Ukrainian]
4. Petrichenko V.F., Lykhochvor V.V. Roslynyntstvo. Novi tekhnolohii vyrashchuvannia polevykh kultur: pidruchnyk. - 5-te vid., vyrav., dopov. Lviv: NVF "Ukrainski tekhnolohii", 2020. 806 p. (Title: Crop Production. New Technologies for Field Crop Cultivation: Textbook)

Additional sources of information:

1. Crop production manual. FAO. 2020. Available at: <https://www.fao.org/3/ca7556en/CA7556EN.pdf>
2. Statistics in Agriculture. Available at: <https://fao.org/faostat>
3. Ministry of Agriculture Politics <http://www.minagro.kiev.ua/>
4. Technology of cultivation (field crops) <http://agro-business.com.ua/>
5. Technology of cultivation (field crops) <https://www.agronom.com.ua/>
6. Precision farming (Demo tools for studying) <https://www.agrivi.com/blog/precision-farming/>
7. All about pesticides <https://pesticidestewardship.org/homeowner/understanding-pest-management/>