BIOLOGICAL FUNDAMENTALS OF PLANTS
Department of Plant Growing

Lecturer **V.I. Trotsenko**
Semester **4**
Educational level: **Postgraduate education**
ECTS credits: **4.0**
Form of control: **credit**
Classroom hours **88** (Lectures - 44 hours, practical classes or laboratory work - 44 hours)

A general description of the subject

The program of the course "Biological Fundamentals of Plant Growing" contributes to the formation of future specialists of technological training in the production of environmentally friendly crop production.

The study of the subject involves the study of the concept and content of technology of cultivation of field crops, the influence of the main natural factors on the construction of technology, as the most appropriate system of agricultural measures in cultivation of crops, coefficients of water consumption use, studies the theoretical bases of optimization of energy and technology resources, peculiarities of production of environmentally friendly products in plant growing.

Students' acquisition of this discipline is necessary for the conscious study of other related disciplines that form the professional training of highly qualified agronomists.

Lecture topics:

1. Subject, method, tasks of ecological and biological plant growing. Ecological basis of plant growing.
2. The biological basis of plant production.
3. Ecological features of field crops.
4. Biological methods of protection of field crops.
5. Eco-friendly technologies of growing cereals. Winter wheat
6. Eco-friendly technologies of growing cereals. Spring wheat
7. Eco-friendly technologies of growing cereals. Winter rye
8. Eco-friendly technologies of growing cereals. Spring rye
9. Eco-friendly technologies of growing cereals. Barley
10. Eco-friendly technologies of growing cereals. Triticale
11. Eco-friendly technologies of growing cereals. Maize
12. Eco-friendly technologies of growing cereals. Buckwheat
13. Eco-friendly technologies of growing large crops. Oat
14. Eco-friendly technologies of growing leguminous crops. Soybean
15. Eco-friendly technologies of growing leguminous crops. Pea
16. Eco-friendly technologies of growing of industrial crops. Sunflower
17. Eco-friendly technologies of growing of industrial crops. Rape
18. Eco-friendly technologies of growing of industrial crops. Linseed oil
19. Eco-friendly technologies of growing of industrial crops. Sugar beet
20. Eco-friendly tobacco growing technologies.
21. Eco-friendly technologies for growing potatoes. Potato
22. Eco-friendly technologies for growing fodder grasses.

Topics: (seminar, practical, laboratory)

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2. The biological bases of plant production.
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