**Optimization of Agroecosystem Structure**

**Goals and objectives of the course**

The discipline aims at students’ mastering basic principles for establishment of agrolandscapes and sustainable agroecosystems.

**Principal tasks of the discipline**

* Study of the factors to provide increase in the productivity and sustainability of agroecosystems;
* Study of the measures for efficient allocation of plants;
* Study of the ecological conditions for sustainable agroecosystem formation;

The matter at issue within the course is the varieties and hybrids of agricultural plants, zonal crop rotation systems, organic and mineral fertilizers, architectonics of sowing cultivated plants.

**Basic topics of the discipline**

1. Structural bases of an agroecosystem.
2. Factors of increased productivity and sustainability of an agroecosystem.
3. Optimization of architectonics of the vegetation cover.
4. Synchronization of optimum environmental conditions and the production cycle.
5. Establishment of sustainable agroecosystems.