# FIELD CROPS TECHNOLOGY (YEAR III, SEM. V)

#### Nr. transferable credits 4

# The status of the discipline

Field discipline (compulsory)

# **Discipline holder**

Prof. Dr. Teodor ROBU

# Discipline objectives (course and applications)

The course aims to acquire by students the knowledge of rotation, fertilizers and amendments used in agriculture, weeds, diseases and crop pests. Also, the acquisition of the necessary knowledge for the establishment of field agricultural crops will be pursued.

The practical works aim at acquiring by students the knowledge regarding the biological peculiarities of field plants (anatomy, morphology), their systematic classification (family, genus, species, varieties), the requirements for vegetation factors (temperature, humidity, food). , soil, light), their ecological zoning

# **Content of the discipline (analytical program)**

# **Course (Chapters / subchapters)**

**INTRODUCTORY NOTIONS**. Field crop technology: definition, object, research methods, connection with other disciplines. Factors that condition production.

**CEREALS**: Wheat, rye, triticale, barley, oats, corn, sorghum, millet - importance, distribution, biological, systematic features, requirements for vegetation factors and technology cultivation.

**GRAIN VEGETABLES**: Peas, soybeans, beans - importance, distribution, biological, systematic features, requirements for vegetation factors and cultivation technology.

OIL PLANTS: Sunflower, rapeseed, mustard - importance, spread,

biological, systematic features, requirements for vegetation factors and cultivation technology.

**TEXTILE PLANTS**: Fiber linen, hemp - importance, distribution, biological, systematic features, requirements for vegetation factors and cultivation technology.

**PLANTS PRODUCING TUBERS AND ROOTS**: Potato, beet for sugar - importance, distribution, biological, systematic features, requirements for vegetation factors and cultivation technology.

**TOBACCO** - importance, distribution, biological, systematic features, requirements for vegetation factors and cultivation technology.

**HOPE** - importance, distribution, biological features, systematic, requirements for vegetation factors and cultivation technology.

## **Practical work**

Knowledge of sowing and planting material.

Seed quality control: taking and forming samples, sending to the laboratory...

Determination of purity, seed mass, moisture and glassiness, germination and viability.

Cereal biology: morphological, anatomical, biological features.

**CEREALS** - morphological and systematic features.

**GRAIN VEGETABLES** - morphological and systematic features

**OILY PLANTS** - morphological and systematic features.

**TEXTILE PLANTS** - morphological and systematic features.

PLANTS PRODUCING TUBERS AND ROOTS - morphological features and systematic.

**TOBACCO AND HOPE** - morphological and systematic features.

Final knowledge verification colloquium.

# **Bibliography**

- 1. Axinte M., Roman Gh.V., Borcean I., Muntean L. S., 2006 *Fitotehnie*, Ed. "Ion Ionescu de la Brad", Iași.
- 2. Bîlteanu Gh., 1998 FITOTEHNIE, vol. I, Ed. Ceres, Bucureşti.
- 3. Bîlteanu Gh., şi colab., 1991 FITOTEHNIE, vol. II, Ed. Didactică şi Pedagogică, Bucureşti.
- 4. Zaharia M.S., 2011 *Tehnologia culturilor de câmp*. I.S.B.N. 978-973-147-094-8, Editura "Ion Ionescu de la Brad" Iași.
- 5. Aglaia Mogârzan, T. Robu, M. Zaharia, 2010 *Fitotehnie Îndrumător pentru lucrări practice*. I.S.B.N. 978-973-147-058-0, Editura "Ion Ionescu de la Brad" Iași.
- 6. Zaharia M.S., Aglaia Mogârzan, T. Robu, 2011 *Fitotehnie Lucrări de laborator*. I.S.B.N. 978-973-147-092-4, Editura "Ion Ionescu de la Brad" Iași.

#### Final evaluation

Forms of evaluation		Percentage of the final grade
Exam	Written evaluation	60%
Assessment of the activity during the semester	Oral evaluation during the semester, verification tests, laboratory colloquium.	40%

## Contact

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