

Faculty of Environmental Management and Agriculture

Course title: TECHNOLOGICAL PROGRESS

ECTS credit allocation (and other scores): 2.0

Semester: spring

Level of study: ISCED-7 - second-cycle programmes (EQF-7)

Branch of science: Agricultural sciences

Language: English

Number of hours per semester: 30

Course coordinator/ Department and e-mail: prof. dr hab. inż. Krzysztof Jankowski, Department of Agrotechnology, Agricultural Production Management and Agribusiness, krzysztof.jankowski@uwm.edu.pl

Type of classes: classes and lectures

Substantive content

CLASSES: Innovative solutions in soil cultivation, seeding, potato planting and crop protection. Equipment for the maintenance of green areas. Tools and implements for small-scale tractors used in horticulture and forestry. Decision-support methods in crop protection.

LECTURES: Changes in the global structure of agricultural production. Technological progress as the combined output of technical, biological and chemical progress, changes in agrarian structure and social factors. Feedback between technical, biological and chemical progress. Effectiveness of technical progress. Progress in agricultural chemistry, changes in the structure of expenditures on industrial and non-industrial means of production, including fertilizers and crop protection agents. Crop protection in Poland and other countries. Effectiveness of changes in agrarian structure. Organizational progress in agriculture.

Learning purpose: Students learn methods of quantifying technological progress (technical, chemical, organizational, etc.) in agriculture.

On completion of the study programme the graduate will gain:

Knowledge: The student has knowledge of advanced technologies and tools used in agriculture. The student is familiar with technical solutions in contemporary agriculture.

Skills: The student identifies solutions that increase agricultural output and profits based on the existing environmental and technical factors. The student plans technological processes relating to agricultural production based on expert knowledge and specialist skills.

Social Competencies: The student identifies and solves professional problems. The student is aware of his/her professional liability.

Basic literature: Banasiak J. 1999. Agrotechnologia. PWN, Warszawa.

Supplementary literature: –

The allocated number of ECTS points consists of:

Contact hours with an academic teacher: 1.28 ECTS points

Student's independent work: 0.72 ECTS points