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| Course: | *Agricultural Machinery* |
| Course id:3ОАЕ3О12 |
| Number of ECTS:5 |
| Teacher: | Mihal O. Meši; Marko Kostić |
| Course status | Mandatory |
| Number of active teaching classes (weekly) |
| Lectures: 3 | Tutorials: 2 | Other teaching types: | Study research work: | Other classes: |
| Precondition courses | None |
| 1. Educational goal

Gaining knowledge about basic technical and exploitative characteristics of agricultural machinery. |
| 1. Educational outcomes

Managing terminology and basic technical and exploitative characteristics of agricultural machinery. |
| 1. Course content

*Theoretical instruction*Internal combustion engines (working principles, parts, fuel). Power transmission and torque on tractors. Operational and braking systems. Hydraulic and pneumatic installations. Tractor equipment and its development. Classification and work indicators of machinery generating units. Tools for basic, complimentary and reduced land farming. Machinery for fertilization, sowing, planting and processing between rows. Universal combine harvesters for wheat, corn, soy, sunflower, rapeseed. Sugar beet and potato extraction machinery. Fruit and grape picking machinery. Means of transport in agriculture. Plant protection machines. Machines, devices and equipment in animal farming (storing hay and silage, drying and dehydration equipment, machines for preparation of grain and root livestock feed). Sheep farm equipment for watering and water distribution, ventilation, heating, feeding, milking and waste management.*Practical instruction*Introduction to basic parts and operation of diesel engines, power transmission and torque on tractors. Demonstration of and introduction to basic configurations and working features of tools used in basic processing, pre-sowing preparations, fertilization, sowing, planting and cultivation between rows. Demonstration of and introduction to technological working scheme of universal combine harvesters, corn husking machines and plant protection machines. Demonstration of and introduction to devices and equipment in animal farming: machinery used for storing hay and silage, drying and dehydration equipment, machines for preparation of grain and root livestock feed. Demonstration of equipment used for farm watering, feeding, ventilation, milking and waste management.Calculation tutorials: soling tasks related to generating units’ work efficiency in agriculture.  |
| 1. Teaching methods

Lectures, tutorials |
| Knowledge evaluation (maximum 100 points) |
| Pre-examination obligations | Mandatory | Points | Final exam  | Mandatory | Points |
| Lecture attendance | Yes/No | 5 | *Written or oral exam* | Yes | 35 |
| Test | Yes/No | 15 + 15 |  |
| Tutorials | Yes/No | 15 |
| Preliminary test | Yes/No | 15 |
| Literature  |
| Ord. | Author | Title | Publisher | Year |
|  | Mihal Meši | Poljoprivredne mašine |  |  |
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