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| Name of course: **Operation of agricultural machinery**  | **Credit value: 3** |
| **Course** **classification**: **classification**  |
| **The proportion of the practical nature of the course, „educational character”: 50**/50 (credit%) |
| **Type of course: 1** theoretical / 1 practical, and the **total number: 28 hours** in the given **semester.**Further (unique) means and properties of knowledge transfer:  |
| **Exam** type (colloquium / practical grade / **other** ): colloquiumFurther (unique) means of knowledge verification**:**  |
| The curricular **place of the course** (which semester): 1 |
| Prerequisites (if any): **-**  |

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| **Course description: a brief, but informative description of the knowledge to be acquired (14 weeks). (9 for MSc graduates) weeks** |
| The general aim of teaching the subject:In the course of this subject, students will learn about the main soil tillage machinery, the various types of seed drills, irrigation equipment, nutrient supply and crop protection machines, as well as the machines and their components for harvesting grain and root crops.Topics:1. Operation of soil cultivation machinery I.2. Operation of soil cultivation machinery II.3. Operation of seed drills I.4. Operation of seed drills II.5. Operation of nutrient replenishment machines I.6. Operation of nutrient replenishment machines II.7. Operation of irrigation machinery I.8. Operation of irrigation machinery II.9. Operation of plant protection machinery I.10. Operation of plant protection machinery II.11. Harvesting machinery I. Operation of a combine harvester.12. Harvesting machinery II Operation of maize harvesting machinery.13. Operation of machines for harvesting fodder I.14. Operation of machines for harvesting fodder II.The general aim of the exercise:In the course of the course, students will acquire the knowledge necessary for the determination and adjustment of the operating parameters of the main soil cultivation machines, the various sowing machines, irrigation equipment, nutrient supply and plant protection machines, as well as machines for harvesting grain and root crops.Topics:1. Operation of soil cultivation machinery I.2. Operation of soil cultivation machinery II.3. Operation of seed drills I.4. Operation of seed drills II.5. Operation of nutrient recovery machines I.6. Operation of nutrient replenishment machines II.7. Operation of irrigation machinery I.8. Operation of irrigation machinery II.9. Operation of plant protection machinery I.10. Operation of plant protection machinery II.11. Harvesting machinery I. Operation of a combine harvester.12. Harvesting machinery II Operation of maize harvesting machinery.13. Operation of machines for harvesting fodder I.14. Operation of machines for the harvesting of fodder II |
| **Required and recommended reading:** |
| **Required reading:**1. Szendrő Péter (ed.): Mezőgazdasági géptan ISBN 96391211772. Szendrő Péter (ed.): Példák mezőgazdasági géptanból ISBN 9633562066**Recommended reading:** 3. Brian Bell: Farm Machinery ISBN 1903366682 4. S Böttinger: Grundlagen der Landtechnik |
| **Competencies to be acquired, related to the course:** |
| **a) knowledge:**  Knowledge of the general and specific characteristics of the field, its boundaries, the main trends in its development and its links with related fields.**b) ability:**  They takes a multifaceted, interdisciplinary approach to identifying specific professional problems, and explore and formulate the detailed theoretical and practical background needed to solve them.**c) attitude:**  They strive to put the latest findings in the field at the service of their own development.**d) autonomy and responsibility:**  Plan and carry out activities independently.  |

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| **Course leader** (name, post, academic degree): **Dr. Zoltán Hagymássy, Associate Professor** |
| **Other lecturer(s) involved in teaching the course, if any** (name, post, academic degree): **Árpád Illés, assistant lecturer** |