

Sylabus przedmiotu

Course name:

REGENERATIVE AGRICULTURE

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|--|---|
| ECTS | 4 |
| Course status | <i>complementary</i> |
| Course final assesement/evaluation of outcomes | <i>exam / credit / credit unrated</i> |
| Prerequisites | <i>passing the subject AGRICULTURE OR AGROECOLOGY</i> |

Main field of study:

ERASMUS

| | |
|---------------------------------------|--------------------------|
| Profile of study | <i>General-academic</i> |
| The code of studies (education level) | <i>Bachelor / Master</i> |
| Semester of studies | <i>winter / summer</i> |
| Language of instruction | <i>English</i> |

Course offered by:

| | |
|--|---|
| Name of faculty offering the course | <i>Agriculture and Economy</i> |
| Name of department offering the course | <i>Department of Agroecology and Plant Production</i> |
| Koordynator przedmiotu | <i>Agnieszka Klimek-Kopyra</i> |

Learning outcomes of the course:

| Symbol of outcome | Description of learning outcome | Reference to | |
|---|---|------------------------------|------------|
| | | main field of study outcomes | discipline |
| KNOWLEDGE – student knows and/or understands: | | | |
| K1_RE_W01 | the basic processes involved in the life cycle of technical equipment, facilities and systems | P6S_WG P7S_WG | RR |
| K1_RE_W02 | the pedogenetic factors and processes shaping the soil cover, the role and functions of soil in the natural environment, the natural and human-induced processes taking place in the soil, its agricultural suitability, soil systematics and the ecological processes taking place in the soil-plant-atmosphere system | P6U_W P6S_WG | RR |
| K1_RE_W03 | mathematical and IT methods and tools applicable to management, agriculture and economics, as well as legal provisions on information gathering and processing | P6U_W | RR |

SKILLS – student is able to:

| | | | |
|-----------|---|---------------|----|
| K1_RE_U01 | formulate and solve complex and non-routine agricultural problems and perform tasks under conditions that are not wholly predictable, through appropriate selection of sources of information, evaluation, critical analysis of acquired information and the selection and application of relevant methods and tools, including advanced ICT techniques | P6S_UW; P6U_U | RR |
| K1_RE_U02 | plan and organise work individually and as part of a team, and interact with others in teamwork (including interdisciplinary teams) | P6U_U | RR |
| K1_RE_U03 | use analytical, simulation and experimental methods to analyse and evaluate processes observed in agriculture | P6U_U | RR |

SOCIAL COMPETENCE- student is ready to:

| | | | |
|-----------|--|-------|----|
| K1_RE_K01 | fulfilling social obligations, co-organising activities for the environment and the social environment | P6U_K | RR |
| K1_RE_K02 | to take care of the achievements and traditions of the profession and to conduct its professional activities in an ethical, socially responsible manner and in accordance with the public interest | P6U_K | RR |

Teaching contents:

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|--|--|--------------|
| Lectures | 30 | hours |
| Topics of the lectures | <ol style="list-style-type: none"> 1. Contemporary farming systems in the EU 2. EU climate policy 3. Paradigms of regenerative agriculture 4. Biologisation and good practice 5. Measures of progress in implementing practices for regenerative agriculture 6. Agriculture 4.0 - Interaction between science and practice 7. Regenerative agriculture as a business model 8. Regenerative agriculture in practice 9. Certification of carbon farming | |
| Accomplished learning outcomes | K1_W01; K1_W02 | |
| Verification methods, rules and criteria of outcome assessment | Single-choice test (minimum 50% correct answers to pass the exam); the proportion of the lecture pass mark in the final mark is 50%. | |

| | | |
|----------------|--|--------------|
| Classes | 30 | hours |
| | <ol style="list-style-type: none"> 1. Root crop production technology according to the principles of regenerative agriculture 2. Project 1- preparation of a technique for sugar beet. according to the principles of regenerative agriculture 3. Cereal crop production technology according to the principles of regenerative agriculture | |

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|---------------------------------------|--|
| Topics of the classes and field trips | <p>4. Project 2- Preparation of technology for winter wheat according to regenerative agriculture principles</p> <p>5. Oilseed production technology according to the principles of regenerative agriculture</p> <p>6. Project 3- preparation of a technique for winter rapeseed according to regenerative agriculture principles</p> <p>7. Legume crop production technology according to the principles of regenerative agriculture</p> <p>8. Management of RUPDs according to the principles of regenerative agriculture</p> <p>9. Carbon emission calculation- verification and use of available tools</p> |
|---------------------------------------|--|

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|--|---|
| Accomplished learning outcomes | K1_U01; K1_U02; K1_U03 |
| Verification methods, rules and criteria of outcome assessment | <p>demonstration of practical skills.</p> <p>The contribution of the pass mark for the design exercises to the final mark is 50%.</p> |

References:

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|---------------|--|
| Basic | <p>Zimmer G.F. 2024. Rolnictwo regeneratywne. ISBN:978-83-7579-927-9</p> <p>Aydin V. 2023. Regenerative -Agriculture. Publisher: IKSAD ISBN: 978-625-367-328-4</p> |
| Supplementary | <p>Melvani K. 2012. Handbook of regenerative agriculture. Edition: 1 Publisher: Neo Synthesis Research Centre Editor: Kamal Melvani ISBN: 978-955-0939-00-8</p> <p>Dent D., Boincean B. 2021. Regenerative agriculture. ISBN : 978-3-030-72223-4</p> |

Structure of learning outcomes:

| | | |
|---|-----|-------|
| Discipline: RR | 4 | ECTS* |
| Discipline: # (provide appropriate symbol - if the course relates to more than one academic discipline) | ... | ECTS* |

Structure of student activities:

| | | | | |
|-------------------------------|-----|-------|-----|-------|
| Contact hours | 80 | godz. | 3,2 | ECTS* |
| including: | | | | |
| lecture | 30 | godz. | | |
| classes and seminars | 30 | godz. | | |
| consultations | 15 | godz. | | |
| participations in research | ... | godz. | | |
| mandatory trainership | ... | godz. | | |
| participation in examinations | 5 | godz. | | |
| e-learning | ... | godz. | ... | ECTS* |
| student own work | 20 | godz. | 0,8 | ECTS* |