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| Polish name of the course:   |  | Przetwórstwo ekologicznych surowców pochodzenia roślinnego   |   |  | ECTS  | 3   |
| English name of the course:  |  | Processing of organic plant raw materials  |   |  |   |   |
| Name of study:   |  | Organic Agriculture and Food Production (OAFP)   |   |  |   |   |
| Language:  |  | English  |   |  | Stage: I  |   |
| Form of studies:   | <input checked="" type="checkbox"/> intramural | Type of module:  | <input type="checkbox"/> basic                  | <input checked="" type="checkbox"/> obligatory | Semester: 5   | <input checked="" type="checkbox"/> winter semester |
|  | <input type="checkbox"/> extramural            |  | <input checked="" type="checkbox"/> directional | <input type="checkbox"/> elective              |   | <input type="checkbox"/> summer semester            |
| Academic year:   |  |  |   | 2021/2022                                      | Catalogue number:   | ROL-ER-1S-05Z-08                                    |
| Coordinator of the course  |  | Andrzej Cendrowski, PhD Eng.   |   |  |   |   |
| Teachers responsible for the module:   |  | Lecturers of the Division of Fruit, Vegetable and Cereal Technology, Department of Food Technology and Assessment, Institute of Food Sciences  |   |  |   |   |
| Objectives of the module:  |  | <p><b>Goal:</b><br/>The aim of the course is to familiarize students with selected technologies used in processing of organic raw materials of plant origin and the functioning of the organic food market.</p> <p><b>Description:</b><br/>Lecture topics: Quality requirements for organic raw materials of plant origin sent for processing. Traditional and modern processing methods. Selected processing technologies used in fruit-vegetable and cereal industry including machines and devices. Organic processing in Poland and worldwide. Plant-based organic food market. The use of additional and auxiliary substances in the processing of plant raw materials. Production waste management.<br/>Topics of exercises: Processing technologies used in the fruit-vegetable and cereal industries. Assessment of the impact of additional substances used in the fruit-vegetable and cereal industries. The presentation of obtained results regarding the effect of applied technology and additives on the product quality.</p> |   |  |   |   |
| Teaching forms, number of hours:   |  | <p>W - lecture, hours 15<br/>LC - laboratory exercises, hours 15</p>   |   |  |   |   |
| Teaching methods:  |  | Lectures, Laboratory exercises   |   |  |   |   |
| Formal prerequisites and initial requirements:   |  | Students should have basic knowledge in the scope of plant cultivation in organic system, obtaining raw materials and food production.   |   |  |   |   |
| Learning outcomes :  |  | Learning outcomes for the course   |   |  | Reference to effects for the study program for the field of study | The impact of the course on the field effect *)     |
| Knowledge: (the graduate knows and understands)  | W1   | knows the organic properties of raw materials of plant origin, as well as methods and principles of their safe application; plans the technologies of their production taking into account biological, chemical and physical threats to food safety  |   |  | K_W13   | 2   |
| Skills: The graduate can   | U1   | demonstrates knowledge of advanced food production technologies in fruit-vegetable and cereal industries taking into account potential food safety hazards and ways to eliminate the resulting risk  |   |  | K_U17   | 2   |
| Competences: the graduate is ready)  | K1   | is aware of the importance of social, professional and ethical responsibility for the organic production of high-quality food and the shaping and state of the natural environment   |   |  | K_K04   | 1   |
| Program content ensuring the achievement of learning outcomes:                                       |  | Quality requirements for organic raw materials of plant origin sent for processing. Traditional and modern processing methods. Selected processing technologies used in fruit-vegetable and cereal industry. Plant-based organic food market. The use of additional and auxiliary substances in the processing of plant raw materials. Production waste management.  |   |  |   |   |
| The verification way of learning outcomes :  |  | <p>W1 – written exam<br/>U1 – final test from classes; classes report</p>  |   |  |   |   |
| Details on the methods of verification and forms of documentation of the learning outcomes achieved: |  | evaluation works with assessment   |   |  |   |   |
| Elements and weights with the impact on the final grade:   |  | written exam – 50%; final test from classes – 50%  |   |  |   |   |
| Place of the classes:  |  | didactic classroom, laboratory classroom   |   |  |   |   |
| Mandatory and supportive materials   |  |  |   |  |   |   |

1. Domestic and International Journals – selected articles provided by the teacher – Journal of Cereal Science, Food Chemistry, Cereal Foods Word, Getreide, Mehl und Brot, Progress in Plant Protection, Fragmenta Agronomica, Acta Agrophysica, LWT, Food Composition and Analysis, Food and Bioprocess Technology, Fruits, International Journal of Vegetable Science, Journal of Agricultural and Food Chemistry.

ANNOTATIONS

\*) 3 - advanced and detailed, 2 - significant, 1 - basic,

Quantitative indicators characterizing the module / subject:

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|--|----------|
| Estimated number of work hours per student (contact and self-study) essential to achieve presumed learning outcomes of the module- base for quantifying ECTS | 75 h     |
| The total number of ECTS points that the student receives during classes that require the direct participation of academic teachers or other teachers:       | 1,2 ECTS |