Appendix No. 1.5 to the Resolution No. 61/2025
of the Rector of the University of Rzeszów

SYLLABUS

REGARDING THE QUALIFICATION CYCLE FROM 2026/2027 TO 2029/2030
ACADEMIC YEAR 2028/2029

1. BASIC COURSE/MODULE INFORMATION

Course/Module title	**Vegetable and Fruit Growing**
Course/Module code *	
Faculty (name of the unit offering the field of study)	Faculty of Technology and Life Sciences
Name of the unit running the course	Institute of Agricultural Sciences, Environmental Protection, and Management
Field of study	Agriculture
Qualification level	First-cycle
Profile	General academic profile
Study mode	Full-time
Year and semester of studies	Year III, Semester 5
Course type	Major
Language of instruction	English
Coordinator	Assoc. Prof. Natalia Matłok, PhD, DSc, Eng
Course instructor	Assoc. Prof. Natalia Matłok, PhD, DSc, Eng Assoc. Prof. Wojciech Litwińczuk, , PhD, DSc, Eng

* - as agreed at the faculty

1.1. Learning format – number of hours and ECTS credits

Semester (no.)	Lectures	Classes	Laboratories	Seminars	Practical classes	Internships	Field classes	**ECTS credits**
5	15		20				10	4

1.2. Course delivery methods
x- conducted in a traditional way
- involving distance education methods and techniques

1.3. Course/Module assessment (exam, pass with a grade, pass without a grade)
exam

2. PREREQUISITES

Natural Foundations of Agriculture, Water Management and Agrometeorology, Agricultural Chemistry, Plant Physiology, General Soil and Crop Management

3. OBJECTIVES, LEARNING OUTCOMES, COURSE CONTENT, AND INSTRUCTIONAL METHODS

3.1. Course/Module objectives

O1	To familiarise students with the economic importance and fundamental principles of field cultivation of key fruit and vegetable species.

3.2. COURSE/MODULE LEARNING OUTCOMES

Learning Outcome	The description of the learning outcome defined for the course/module	Relation to the degree programme outcomes
LO_01	Knows and understands the relationships between environmental and agrotechnical factors and the yield quantity and quality of major fruit and vegetable crops.	K_W01
LO_02	Knows and appreciates the role of fruit and vegetable crops in sustainable rural development and in improving food quality and human well-being.	K_W08
LO_03	Using both acquired and independently sourced knowledge, selects suitable fruit and vegetable species appropriate to the environmental and organisational characteristics of the farm.	K_U01, K_U03
LO_04	Is open to technological and varietal innovations, as well as to alternative perspectives and arguments, in optimising fruit and vegetable production.	K_U04, K_U10
LO_05	Is ready to manage horticultural crops in a responsible and ethical manner to obtain yields of high dietary value.	K_K04

3.3. Course content

A. Lectures

1. Major groups of fruit crops and their economic significance in Poland, the EU, and worldwide. Dietary value and uses of fruits. Novel fruit crop species introduced into cultivation.
2. Characteristics of fruit crop production. General principles of establishment, maintenance, and controlled production in orchards and berry plantations.
3. Major groups of vegetable crops. Economic significance of vegetables in Poland, the EU, and worldwide. Dietary value and uses of vegetables. Alternative vegetable species.
4. Characteristics of vegetable crop production. General principles of establishment, management of open-field vegetable crops, and crop scheduling to control harvest dates.

B. Laboratories, field classes

Laboratories:
1. Propagation characteristics of fruit and vegetable crops
2. Characteristics (origin, morphology, environmental requirements) of major fruit trees, shrubs, and perennial herbaceous plants
3. Overview of production technology for major fruit crop species
4. Characteristics (origin, morphology, environmental requirements) of key field-grown vegetables (cabbage and cauliflower, carrot and beetroot, onion, tomato, cucumber)
Field classes
Modern technologies and microclimate control in soilless strawberry production under cover / Agrotechnology, water management, and wet harvesting technology of American cranberry.

3.4. Methods of Instruction

Lecture with multimedia presentation; laboratory classes – small group work; practical (technical) classes; experiment; field classes – study visit.

4. Assessment techniques and criteria

4.1 Methods of evaluating learning outcomes

Learning outcome	Methods of assessment of learning outcomes (e.g. test, oral exam, written exam, project, report, observation during classes)	Learning format (lectures, classes…)
LO-01	Test, written exam	Laboratories, lectures
LO-02	Test, written exam	Laboratories, lectures
LO-03	Test, observation during classes	Laboratories
LO-04	Test, observation during classes, report	Laboratories, field classes
LO-05	Observation during classes, report	Laboratories, field classes

4.2 Course assessment criteria

Assessment of laboratory classes: graded pass; the final grade is based on marks obtained from written assessment tests, in-class participation, and engagement in discussions. Assessment of field classes: report on the study visit. Lectures: examination; a passing grade is determined by the total score obtained (>50% of the maximum points) in a written exam comprising open-ended and closed-ended questions: satisfactory (3.0) 51–59%, satisfactory plus (3.5) 60–69%, good (4.0) 70–79%, good plus (4.5) 80–89%, very good (5.0) 90–100%. The prerequisite for completing the module is the attainment of all specified learning outcomes.

5. Total student workload needed to achieve the intended learning outcomes – number of hours and ECTS credits

Activity	Number of hours
Course hours	45
Other contact hours involving the teacher (consultation hours, examinations)	25
Non-contact hours - student's own work (preparation for classes or examinations, projects, etc.)	30
Total number of hours	100
Total number of ECTS credits	4

* One ECTS point corresponds to 25-30 hours of total student workload

6. Internships related to the course/module

Number of hours	-
Internship regulations and procedures	-

7. Instructional materials

Compulsory literature: materials provided by the teacher and online resources on the topics covered
Complementary literature: online resources on the topics covered

Approved by the Head of the Department or an authorised person