

# SYLLABUS

REGARDING THE QUALIFICATION CYCLE FROM 2024/2025 TO 2027/2028

## 1. BASIC COURSE/MODULE INFORMATION

Course/Module title	Winemaking
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 Food Technology and Nutrition Institute of Food Technology and Nutrition Department of General Food Technology and Human Nutrition
Field of study	Food Technology and Human Nutrition
Qualification level	First grade
Profile	Academic
Study mode	Stationary
Year and semester of studies	III <sup>rd</sup> year, semester 5
Course type	specialized/ Fermentation processes in food production
Language of instruction	Polish
Coordinator	Dr hab. Ireneusz Kapusta, prof. UR
Course instructor	Lecture: dr hab. Ireneusz Kapusta Lab: Dr inż. Agata Pawłowska, dr inż. Paweł Hanus

\* - as agreed at the faculty

### 1.1. Learning format – number of hours and ECTS credits

Semester (no.)	Lectures	Classes	Colloquia	Lab classes	Seminars	Practical classes	Internships	Others	ECTS credits
5	15			30					5

### 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

biochemistry, microbiology, food analysis, general food technology
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### 3. OBJECTIVES, LEARNING OUTCOMES, COURSE CONTENT, AND INSTRUCTIONAL METHODS

#### 3.1. Course/Module objectives

O1	Presentation of wine production methods
O2	Familiarization of the students with the influence of production technology on wine quality

#### 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	Student knows the raw materials used in wine production, as well as technological operations and devices used at individual stages of wine production	K_W11
LO_02	Student classifies and characterizes raw materials, semi-finished products and products produced in the vinification process	K_W11
LO_03	Student is able to select the appropriate technology for the wine produced	K_U08
LO_04	Student is able to use and prepare fruit for the production of must and wine	K_U05
LO_05	Student is able to critically analyze the way a vineyard functions in terms of the technological processes and technical solutions used, and applies these solutions in practice	K_U07, K_U11
LO_06	Student is familiar with current wine production technologies	K_K02
LO_07	Student takes responsibility for the actions taken, adheres to the principles of professional ethics	K_K04

#### 3.3 Course content

##### A. Lectures

Content outline
History of winemaking in the world and in Poland, wine regions, wine classification
Vineyard design, establishment and maintenance
Raw materials, wine yeast and auxiliary materials used in winemaking
Machines and devices in winemaking
Traditional and modern wine production methods
Technology of white, red and rosé wine production and sparkling wines
Factors influencing the quality of wine at individual stages of the production process. Wine maturation in tanks, barrels and bottles.

Care of young wine: removal from sediment, wine stabilization, wine clarification, filtering, maturation. Wine defects and diseases
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## B. Laboratories

Content outline
Calculation of the composition of wine mixes
Calculations for enrichment and sweetening of musts and wines
Assessment of the effect of enzyme preparations on the efficiency of must pressing, Preparation of wine mixes
Fermentation efficiency and potential alcohol content
Conversion of SO <sub>2</sub> dose for various salts of sulfuric acid (IV)
Drainage of wine from the yeast sediment, protection against oxidation.
Microscopic identification of turbidities and sediments
Protein stabilization of wine. Tartar stabilization of wine. Filtering of wine, Stability tests of wine products

### 3.4 Methods of Instruction

Lecture supported by a multimedia presentation.

Laboratories: group work - accounting tasks, discussion, work in a laboratory, carrying out experiments, designing methods.

## 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	lectures, LABORATORIES
LO-02	test, written exam	lectures, LABORATORIES
LO-03	test, written exam	lectures, LABORATORIES
LO-04	test, written exam	Lectures, LABORATORIES
LO-05	project, report	LABORATORIES
LO-06	project, report	LABORATORIES
LO-07	observation during classes	LABORATORIES

### 4.2 Course assessment criteria

<p>Lecture: written exam</p> <p>The number of points obtained is decisive for the positive evaluation (&gt; 50% of the maximum number of points): dst 51-59%, dst plus 60-69%, db 70-79%, db plus 80-89%, very good &gt; 90%.</p> <p>Laboratories: passing with a grade</p>
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Assessment determined on the basis of partial grades from the colloquium (knowledge check), presentation / report on the elaboration of the selected issue (skills), participation in the discussion, observation of activity during classes (social competences).  
The number of points obtained is decisive for the positive evaluation (> 50% of the maximum number of points): dst 51-59%, dst plus 60-69%, db 70-79%, db plus 80-89%, very good > 90%.

The condition for completing the course is achieving all the assumed learning outcomes.

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

Activity	Number of hours
Scheduled course contact hours	15+30/1,5
Other contact hours involving the teacher (consultation hours, examinations)	participation in consultations – 1/0,03 participation in the exam – 2/0,06
Non-contact hours - student's own work (preparation for classes or examinations, projects, etc.)	preparation for the exam – 37/1,23 preparation of a project/presentation – 40/1,33
Total number of hours	125
Total number of ECTS credits	5

\* 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:

1. Y. Margalit, Technologia produkcji wina, PWRiL
2. Steidl R., Renner W., Problemy fermentacji wina, ProLibris, Zielona Góra, 2008
3. Myśliwiec R.: Winorośl i wino, PWRiL, Warszawa 2006
4. Praca zbiorowa pod red. T. Tuszyńskiego i T. Tarko Procesy fermentacyjne – przewodnik do ćwiczeń. Wydawnictwo Uniwersytetu Rolniczego, Kraków 2010
5. Wzorek W., Pogorzelski E.: Technologia winiarstwa owocowego i gronowego. Wyd. Sigma-NOT, Warszawa, 1998

Complementary literature:

1. THE WINE APPRECIATION GUILD, WINE APPRECIATION GUILD, 2010, 3RD EDITION

2. LINSKENS, H. F. AND JACKSON, J. F, WINE ANALYSIS, SPRINGER-VERLAG, 1988
3. M. BALDY, THE UNIVERSITY WINE COURSE, 2011, 3 EDYCJA
4. RONALD S. JACKSON, WINE SCIENCE: PRINCIPLES AND APPLICATIONS, ELSEVIER, 2014
5. IRENEUSZ KAPUSTA WŁAŚCIWOŚCI FIZYKOCHemiczne WINOGRON ORAZ WIN PRODUKOWANYCH W POŁUDNIOWO-WSCHODNIEJ POLSCE, WYD. I ISBN 978-83-7996-297-6 UR 2016

Approved by the Head of the Department or an authorised person