

A COURSE SYLLABUS – DOCTORAL SCHOOL
REGARDING THE QUALIFICATION CYCLE FROM 2021 TO 2025

GENERAL INFORMATION ABOUT COURSE				
Course title	Doctoral seminar			
Name of the unit running the course	Doctoral School at University of Rzeszów			
Type of course (<i>obligatory, optional</i>)	obligatory			
Year and semester of studies	III / V and III / VI			
Discipline	Food and Nutrition Technology			
Language of Course	Polish			
Name of Course coordinator	Dr hab. Eng. Grzegorz Zagała, prof. UR			
Name of Course lecturer	Dr hab. Eng. Grzegorz Zagała, prof. UR			
Prerequisites	In-depth knowledge of food science and human nutrition. Ability to work in food analyzes, theoretical and practical foundations with functional drinks.			
BRIEF DESCRIPTION OF COURSE (100-200 words)				
<p>The subject is aimed at acquiring by the doctoral student knowledge in the field of searching and interpreting the global achievements in the field of food technology and nutrition, with particular emphasis on the subject of own research related to functional drinks, their preservation, fortification and storage. Interpretation of hypotheses put forward by other authors, their discussion and application to own research topics. Developing the ability to work in a laboratory, creating your own research hypotheses, arranging research methodologies and translating conclusions from the results of your own experimental work into the form of presentation and as publication works, including popular science. The ability to disseminate your own knowledge and the results of your own work to the sphere of contact between science and economy through their presentations as part of scientific discourses and industry meetings, including exhibitions, fairs and international conferences as well as internship trips. The ability to substantive and purposeful communication at the interface between science and everyday life, with a synthetic and appropriate for the needs of the recipient presentation of own research results along with their interpretation.</p>				
COURSE LEARNING OUTCOMES AND METHODS OF EVALUATING LEARNING OUTCOMES				
Learning outcome	The description of the learning outcome defined for the course	Relation to the degree programme outcomes (symbol)	Learning Format (Lectures, classes,...)	Method of assessment of learning outcomes (e.g. test, oral exam, written exam, project,...)
Knowledge (no.)	Know and understand			
1 (5th semester)	Methodology for the effects of natural acidity regulators based on ionic inferences.	P8S_WG/3	classes	Forum discussion
2 (5th and 6th semester)	rules for disseminating the results of scientific activities, also in the open access mode by publishing own research results in open access journals	P8S_WG/4	classes	Forum discussion
Skills (no.)	Can			
1 (6th semester)	Independently plan and develop recipes for innovative functional drinks.	P8S_UU/1	classes	Preparation and participation

						in the planning and organization of an international conference
2 (5th and 6th semester)	Initiate a debate	P8S_UK/3	classes			Discussion at the conference forum
3 (5th and 6th semester)	Plan and implement individual and team research projects, also in an international environment	P8S_UO	classes			Discussion on the international forum during the internship
Social competence (no.)	Is ready to					
1 (5th and 6th semester)	Critical evaluation of one's own contribution to the development of a given scientific discipline	P8S_KK/2	classes			Preparation of a multimedia presentation combined with a discussion
2 (5th and 6th semester)	Initiating activities for the public interest	P8S_KO/2	classes			Preparation of presentations at fairs, exhibitions, shows
LEARNING FORMAT – NUMBER OF HOURS						
Semester (no.)	Lectures	Seminars	Lab classes	Internships	others	ECTS
5		30				0
6		30				0
METHODS OF INSTRUCTION						
<p>Semester V: Multimedia presentation (to be selected by a doctoral student as a speaker) combined with a discussion. Discussion within the framework of scientific problems prepared by the doctoral student in the discipline of food technology and nutrition, activity in scientific discussion and the ability to solve a theoretical problem, preparation of a scientific publication by the doctoral student, participation in international conferences, internships and trade fairs</p> <p>Semester VI: Multimedia presentation (to be selected by a doctoral student as a speaker) combined with a discussion. Discussion within the framework of scientific problems prepared by the doctoral student in the discipline of food technology and nutrition, activity in scientific discussion and the ability to solve a theoretical problem, preparation of a scientific publication by the doctoral student, participation in international conferences, internships and trade fairs</p>						
COURSE CONTENT						
Classes::						
5th semester:						

1. Preparation of scientific research methodology
2. Preparation and design of a research stand to assess the impact of natural acidity regulators on the stability of the ionic matrix
3. Preparation of scientific presentations
4. Undertaking scientific discussions

6th semester:

1. Preparation of scientific research methodology
2. Study on recipe development for functional drinks.
3. Principles and rules of formulation
4. Development of original research and creative works
5. Rules of work during industry exhibitions and demonstration fairs in the field of food technology

COURSE ASSESSMENT CRITERIA

Self-presentation of a paper; Participation in discussions at fairs, exhibitions and conferences, including international ones; Participation in an international internship Approval by the promoter of the publication related to the doctoral dissertation;

TOTAL PhD STUDENT WORKLOAD REQUIRED TO ACHIEVE THE INTENDED LEARNING OUTCOMES – NUMBER OF HOURS AND ECTS CREDITS

Activity	Number of hours
Scheduled course contact hours	30+30
Other contact hours involving the teacher (consultation hours, examinations)	
Non-contact hours – student`s own work (preparation for classes or examinations, project, etc.)	300
Total number of hours	360
Total number of ECTS credits	0

INSTRUCTIONAL MATERIALS

Compulsory literature:	<ol style="list-style-type: none"> 1. GENERAL FOOD TECHNOLOGY / EDITED BY ELŻBIETA DŁUŻEWSKA AND KRZYSZTOF LESZCZYŃSKI, 2013, WARSAW: SGGW PUBLISHING HOUSE 2. HUMAN NUTRITION, FOOD AND NUTRITION INSTITUTE (WARSAW). PUBLISHER 3. SELECTED PROCESSES IN FOOD TECHNOLOGY / ELŻBIETA BILLER, AGNIESZKA WIERZBICKA 4. APANOWICZ J., METHODOLOGICAL DETERMINANTS OF SCIENTIFIC WORK: DOCTORAL DISSERTATIONS, HABILITATION THESES, WARSAW 2005
Complementary literature:	SCIENTIFIC ARTICLES RELATED TO THE DOCTORAL INTERESTS PROMOTED BY THE PROMOTER