#### **COURSE OFFERED**

Name of the	Polish	Mikrobiomy człowieka
course	English	Human Microbiomes

#### 1. LOCATION OF THE COURSE OF STUDY WITHIN THE EDUCATION SYSTEM

1.1. Section <sup>1</sup>	Exact and Natural Sciences
1.2. Discipline <sup>2</sup>	Biological Sciences
1.3. Type of education	Stationary
1.4. Level of education	Doctoral School
1.5. Person preparing the course	Prof. Wieslaw Kaca
description	
1.6. Contact	Wieslaw.kaca@ujk.edu.pl

#### 2. GENERAL CHARACTERISTICS OF THE COURSE OF STUDY

2.1. Type of course <sup>3</sup>	specialized subjects in the discipline
2.2. Language of the course	English

#### 3. DETAILED CHARACTERISTICS OF THE COURSE OF STUDY

3.1. Type of classes <sup>4</sup>		Lectures and exercises						
<b>3.2.</b> The number of hours <sup>5</sup>		30 (15h lectures + 15h exercises)						
3.3. Location of	classes	Classes in the UJK teaching room						
3.4. Type of ass	essment	Exam (lectures), conformation with notes (exercises)						
3.5. Didactic methods		Lectures, material evaluation, projects						
3.6. Literature	basic	Author own publication on human microbiomes , Research						
		data Bases i.e. Google Scholar, AI Chat GP 4.						
		The Oral and Gut Bacterial Microbiomes:Similarities, Differences, and ConnectionsKatherine A. Maki, PhD, APRN, AGPCNP-BC1, Narjis Kazmi, MPH1,Jennifer J. Barb, PhD1, and Nancy Ames, PhD, RN						
		Biological Research for Nursing2021, Vol. 23(1) 7-20ªThe Author(s) 2020Article reuse guidelines:sagepub.com/journals-permissionsDOI: 10.1177/1099800420941606journals.sagepub.com/home/br n						

<sup>&</sup>lt;sup>1</sup> Section of Humanities:, Social Sciences, Section of Exact and Natural Sciences, Section of Medical and Health Sciences, Section of Arts.

<sup>&</sup>lt;sup>2</sup> History,Linguistics, Literary Studies, Medical Sciences, Health Sciences, Political and Administrative Sciences, Legal Sciences, Security Sciences, Pedagogy, Communication and Media Studies, Management and Quality Studies, Biological Sciences, Chemical Sciences, Physical Sciences, Earth and related Environmental Sciences, Visual Arts and Artwork Conservation, Musical Arts.

<sup>&</sup>lt;sup>3</sup> General courses, domain specific subjects in the section, disciplinary subjects in the sections, specialized subjects in the discipline.

<sup>&</sup>lt;sup>4</sup> Classes, lecture, seminar.

<sup>&</sup>lt;sup>5</sup> Consistent with the education program at the Doctoral School

Jan Kochanowski University in Kielce.

## 4. OBJECTIVES, SYLLABUS CONTENT AND INTENDEND LEARNING OUTCOMES

4.1. Course objectives (including the form of classes)

**C1.**Basic knowledge and importance of human gut-, oral- uro- and skin - microbiomes.

**C2.** Enhancement of scientific mirobiomes projects development based on PhD individual thesis.

### 4.2. Syllabus content

### Lectures

1. The basic features of four types of human microbiomes. .

2.Effects of microbiomes dysbiosis on long-lasting diseases.

3. Methods of microbiomes studies.

4. Prevention of human microbiomes dysbiosis – prebiotic, probiotics.

Classes

PhD students proposed scheme of project, based on PhD subject. Each PhD student presented project that include aims, methods, results of studies, based on provided and own searching. Projects are presented, discussed and evaluated during lectures and classes. Final notes depends project and knowledge of lectures on oral exams.

## 5. SUBJECT LEARNING OUTCOMES

Learning outcomes	A doctoral student who has passed the subject: in the area of KNOWLEDGE:	Reference to the learning outcomes of Doctoral School (according to the training program at the Doctoral School)			
W01	The doctoral student possesses in-depth knowledge of the latest scientific achievements, encompassing theoretical foundations, general issues, and selected specific topics relevant to the scientific or artistic discipline in which the doctoral dissertation is being prepared	SD_W01			
W02	The doctoral student has advanced knowledge of development trends in disciplines related to the research or project theme being pursued	SD_W02			
W03	The doctoral student is able to formulate significant, current, and unresolved issues in the field of science in which they are studying, particularly in the discipline where the doctoral dissertation is being prepared, including in a foreign language.	SD_W07			
	in the area of SKILLS:				
U01	The doctoral student can define the goal and subject of research or project activities, as well as formulate research hypotheses in the discipline where the doctoral dissertation is being prepare	SD_U01			
U02	The doctoral student is capable of utilizing knowledge from various disciplines to identify, formulate, and creatively solve complex problems or undertake research or project tasks.	SD_U03			

U03	The doctoral student can effectively use a foreign language in research or project activities	SD_U07				
in the area of SOCIAL COMPETENCE:						
К01	The doctoral demonstrates entrepreneurial thinking and actively takes initiative.	SD_K04				

### 6. METHODS OF ASSESSMENT OF THE INTENDED LEARNING OUTCOMES

		METHOD OF ASSESSMENT (+/-)																				
SUBJECT	Oral/writte n exam			Test		Project			activity in class			Own work			Group work			Others				
LEARNING OUTCOMES	The type of classes				The type of classes			The type of classes			The type of classes			The type of classes			The type of classes			The type of classes		
	L	Ε	S	L	Ε	S	L	Ε	S	L	Ε	S	L	Ε	S	L	С	S	L	С	S	
W01	+							+			+			+			+					
W02	+							+			+			+			+					
W03	+							+			+			+			+					
U01	+							+			+			+			+					
U02	+							+			+			+			+					
U03	+							+			+			+			+					
K01	+							+			+			+			+					

### 7. CRITERIA OF ASSESSMENT OF THE INTENDED LEARNING OUTCOMES

Form of classes	Grade	Criterrion of assessment
	3,0	Achievind 51-60% possible points from activity on exercises, group work and own work
r) e	3,5	Achievind 61-70% possible points from activity on exercises, group work and own work
Lecture (L) <sup>6</sup>	4,0	Achievind 71-80% possible points from activity on exercises, group work and own work
Lec	4,5	Achievind 81-90% possible points from activity on exercises, group work and own work
	5,0	Achievind 91-100% possible points from, activity on exercises, group work and own work
۲ (:	3,0	Achievind 51-60% possible points from exam
s (E	3,5	Achievind 61-70% possible points from exam
ise	4,0	Achievind 71-80% possible points from exam
Exercises (E) <sup>7</sup>	4,5	Achievind 81-90% possible points from exam
EX	5,0	Achievind 91-100% possible points from exam

# Accepted for execution

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<sup>&</sup>lt;sup>6</sup> Niepotrzebne usunąć.

<sup>&</sup>lt;sup>7</sup> Niepotrzebne usunąć.