



# UNIVERSITATEA DE ȘTIINȚE AGRICOLE ȘI MEDICINĂ VETERINARĂ CLUJ-NAPOCA

Calea Mănăstur 3-5, 400372, Cluj-Napoca

Tel: 0264-596.384, Fax: 0264-593.792

www.usamvcluj.ro

No. \_\_\_\_\_ of \_\_\_\_\_

USAMV form CN-0709010213

## SUBJECT OUTLINE

### 1. Information on the programme

1.1. Higher education institution	University of Agricultural Sciences and Veterinary Medicine of Cluj-Napoca
1.2. Faculty	Faculty of Food Science and Technology
1.3. Department	Food Science
1.4. Field of study	Food Engineering
1.5. Education level	Master
1.6. Specialization/ Study programme	Gastronomy, Nutrition and Dietetics
1.7. Form of education	Full time

### 2. Information on the discipline

2.1. Name of the discipline	Nutrition Public Health							
2.2. Course coordinator	Prof dr Ramona Suharoschi Assoc Prof dr Romana Vulturar							
2.3. Seminar/ laboratory/ project coordinator	Prof dr Ramona Suharoschi							
2.4. Year of study	I	2.5. Semester	I	2.6. Type of evaluation	Summative	2.7. Discipline status	Content <sup>2</sup>	DS
							Compulsoriness <sup>3</sup>	DO

### 3. Total estimated time (teaching hours per semester)

3.1. Hours per week – full time programme	2	out of which: 3.2. lecture	1	3.3. seminar/ laboratory/ project	2
3.4. Total number of hours in the curriculum	28	Out of which: 3.5. lecture	14	3.6. seminar/ laboratory	14
Distribution of the time allotted					hours
3.4.1. Study based on book, textbook, bibliography and notes					32
3.4.2. Additional documentation in the library, specialized electronic platforms and field					35
3.4.3. Preparing seminars/ laboratories/ projects, subjects, reports, portfolios and essays					35
3.4.4. Tutorials					10
3.4.5. Examinations					10
3.4.6. Other activities					0
3.7. Total hours of individual study	83				
3.8. Total hours per semester	150				
3.9. Number of credits <sup>4</sup>	5				

### 4. Prerequisites (is applicable)

4.1. curriculum-related	<i>Human Nutrition, Food Toxicology, Food chemistry; Food Biochemistry; Food microbiology</i>
4.2. skills-related	The student must have knowledge of food macronutrients and micronutrients; specific, special, personalized food diets; chemical and biochemical characteristics of food compounds; operating IT; office use (excel); internet browsing; qualities of individual work and participation in carrier development pathways



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### 5. Conditions (if applicable)

5.1. for the lecture	The course is interactive, students can ask questions regarding the content of lecture. Academic discipline requires compliance with the start and end of the course. We do not allow any other activities during the lecture, mobile phones will be turned off. Classroom with adequate capacity, with multimedia equipment and internet connection
5.2. for the seminar/ laboratory/ project	Research laboratory - Molecular and Proteomic Nutrition LAB, CDS3, ISV, with endowment of cell biology, cell cultures; microarray platform; internet connection; teaching materials: specialized journals, specialized books During practical works, each student will develop an individual activity with laboratory materials (made available in the book that describes the laboratory work). Academic discipline is imposed throughout the course of practical works.

### 6. Specific competences acquired

Professional competences	C1.1 Use of specialist knowledge for the evaluation, processing and interpretation of human nutrition data C3.1 - Identification and operation with the specific elements of technological, nutritional and dietary projects
Transversal competences	CT3 Carrying out a complex, interdisciplinary scientific work

### 7. Course objectives (based on the list of competences acquired)

7.1. Overall course objective	Systematic development and implementation of nutrition interventions and public health related nutrition intervention programmes through the Intervention Mapping approach.
7.2. Specific objectives	Nutrition intervention programmes promote health by coordinating human behaviour and influencing the social and physical environment. Students learn to identify the causal relationship between nutritional behaviour and general behaviour and mental state and environmental determinants. Students learn how to develop a nutrition intervention program by setting program objectives, selecting intervention methods and strategies, and planning the implementation of the nutrition intervention program. The learning programme will also include the practical example of NGO and CFR Clinic Hospital and local municipalities - promoting health through healthy eating style - among people with special needs.

### 8. Content

8.1. LECTURE Number of hours – 28 hrs	Teaching methods	Notes
How to develop a PND literature project?	Lecture	2 hours
Project: Personalized nutrition: CONCEPTS AND OBJECTIVES	Lecture	2 hrs
		5 hrs



**Personalized and dietary nutrition in childhood (nutritional and dietary features of young children, preschoolers, schoolchildren, adolescents, young adults, mature adults, the elderly, and metabolic programming)**  
**Diet as a possible risk or preventive factor for some chronic diseases (CVD, cancer, osteoporosis, obesity / metabolic syndrome, type II diabetes) Risk / benefit biomarkers**  
**Personalized nutritional interventions (personalized diets)**  
**EU and international research projects in the field of personalized nutrition**  
**Student projects**

Lecture	5 hrs
Lecture	4hrs
Lecture	2 hrs
Lecturer	8 hrs

## 8.2. PRACTICAL WORK

Number of hours – 28 hrs

**Identification of the problem to be solved (case study: NP elderly people, with associated diseases, children, sports, etc.)**  
**Activity: nutritional compounds, fundamental understanding of food composition**

**(7 days) diet analysis**  
**Nutritional Goal Setting (SMART)**  
**Healthy nutrition for the present and for the future!**  
**Nutrient loading of the diet (analysis of nutrients consumed), foods that increase immunity, energy, intended for well-being and good mood, for daily stress management.**  
**Discussion / Debate Diet Analysis (7-days)**  
**Analysis of the combination of mineral vitamins consumed**  
**Analysis of nutritional weaknesses**  
**Application - management / marketing - in the conditions of personalized nutrition - at a supermarket, advertising / promotion schemes, strategies for buying healthy / cheap food (affordable)**  
**Seasonal food choices**  
**Personalized Nutritional Plan (intervention)**  
**Students will design (healthy nutritional design) a week of personalized nutrition and will support the strengths / and justifications of the personalized nutritional plan presented**

Theoretical presentation of practical works  
 (Working in group teams on the project: literature review PND)

Case study

1 lab work (2 hours / work)

2 hours

2 hours

2 hours

2 hours

Case study

Case study

Case study

4 hours

4 hours

Case study

Case study

4 hours

Case study

Case study

4 hours

4 hours

Case study

Case study

Project

*Compulsory bibliography:*

*Food & Nutrition & Dietetics Journals (MDPI, PubMed, Science Direct)*

*Cochrane*

*EMBASE*

**1. Valoarea nutritiva a produselor agroalimentare, R Segal, B Segal, 1983;**



Socaciu Carmen, Curs de chimie alimentara si aditivi alimentari, Cluj-Napoca, 1997.

3. Brad Segal, Constanta Balint, Procedee de imbunatatire a calitatii si stabilitatii produselor alimentare, Ed. Tehnica, Bucuresti, 1982.

4. Mincu, I., 1978, Alimentatia ratională a omului sănătos. Ed. Medicală, Bucuresti

5. Mincu, I., Segal, B., Elena Popa, Rodica Segal, 1989, Orientări actuale în nutriție. Ed. Medicală, Bucuresti

6. Gontea, I., 1971, Alimentatia ratională a omului. Ed. Didactică si Pedagogică, Bucuresti

7. Suharoschi R, Principiile nutritiei umane, Ed AcademicPres, 2013

Optional bibliography:

1. Journal of Nutrition Education

2. Nutrition

3. Journal of Nutrition

4. Nutrition Research

**9. Corroborating the course content with the expectations of the epistemic community representatives, of the professional associations and of the relevant stakeholders in the corresponding field**

The knowledge taught in the course is necessary to know and understand the role of healthy eating and nutrition based on the principles of personalized nutrition in health care and the role of the food industry specialist in developing safe, attractive foods and exploiting the relationship between health and nutrition.

**10. Assessment**

Type of activity	10.1. Assessment criteria	10.2. Assessment methods	10.3. Percentage of the final grade
<b>10.4. Lecture</b>	Course debates on specific topic	continuous	35%
<b>10.5. Seminar/Laboratory</b>	Research volunteers, poster presentation, manuscript review - Talks, posters, manuscripts review	Theoretical and practical skills	5%
<b>10.6. Minimum performance standards</b>			
Publication of min. 1 scientific article in a specialized journal or participation in min. 1 conference / symposium			

<sup>1</sup> Education levels- choose of the three options: Bachelor/\* Master/Ph.D.

<sup>2</sup> Discipline status (content)- for the undergraduate level, choose one of the options:- **FD** (fundamental discipline), **BD** (basic discipline), **CS** (specific disciplines-clinical sciences), **AP** (specific disciplines-animal production), **FH** (specific disciplines-food hygiene), **UO** (disciplines based on the university's options).

<sup>3/</sup> Discipline status (compulsoriness)- choose one of the options – **CD** ( compulsory discipline) **OD** (optional discipline) **ED** ( elective discipline).

<sup>4</sup> One credit is equivalent to 25-30 hours of study (teaching activities and individual study).

<sup>5/\*</sup> Disciplines: AK- Advanced knowledge, CT- Complementary Training, S- Synthesis

**Titular lucrari laborator/seminarii**

Sef lucr dr Oana Lelia Pop

**Prof dr Ramona Suharoschi**

**Titular curs**

**Prof dr Ramona Suharoschi**

**Conf dr Romana Vulturar**

**Data completării**

**14.09.2021**



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**Coordonator disciplină**

**Prof dr Ramona Suharoschi**

**Prof.dr. Adriana Paucean**

**Data avizării în**

**departament**

**22.09.2021**

**Director de departament**

**Prof dr Ramona Suharoschi**

**Data avizării în Consiliul**

**Facultății**

**28.09.2021**

**Decan**

**Prof dr Elena Mudura**