

CHART OF DISCIPLINE/ SYLLABUS

1. Study Program Data

1.1 Higher Education Institution	“VICTOR BABEȘ” UNIVERSITY OF MEDICINE AND PHARMACY OF TIMIȘOARA
1.2 Faculty	MEDICINE
1.3 Department	VII – Internal Medicine II
1.4 Study Domain	HEALTH
1.5 Study Cycle	LICENCE
1.6 Study programme/ Qualification	MEDICINE/MEDICAL DOCTOR

2. Discipline Data

2.1. Discipline name	Principles of healthy nutrition						
2.2 Course tutor(s)							
2.3 Practical activity tutor(s)							
2.4 Year of study	II	2.5 Semester	3	2.6. Assessment type	Colloquium	2.7 Discipline rank	Content ¹⁾
							DS
							Mandatory /Compulsory ²⁾
							DOP

3. Duration/Estimated Time (number of hours/semester of teaching activity)

3.1 Number of hours/week	4	3.2 lecture/course ³	2	3.3 laboratory ⁴	2
3.4 Total hours of curriculum	56	3.5 lecture/course ⁵	28	3.6 laboratory ⁶	28
Time distribution for educational activities					hours
Study support- manuals, lectures, references and notes ⁷					14
Additional documentation – library, dedicated platforms from domain ⁷					8
Documentation for seminars/ practical activity/ projects, themes, portfolios and essays ⁷					8
Tutorship ⁷					
Assessment ⁷					2
Other activities ⁷					2
3.7 Total number of hours for individual study ⁷	34				
3.8 Total number of hours per semester	90				
3.9 Number of credits ⁸⁾	3				

4. Preconditions (if applicable and requested)

4.1 of curriculum	Having studied Biochemistry
4.2 of competence	-

5. Conditions (if applicable and requested)

5.1 for courses	<ul style="list-style-type: none"> Attendance is mandatory, requiring a minimal attendance percentage of 50% of the total number of lectures.
5.2 for laboratories/practical activities	<ul style="list-style-type: none"> Attendance is mandatory, the maximum percentage of absences being 20% of the total number of practical activities; Attendance recovery is permitted for a maximum of 30% of the total number of practical activities provided they pay the recovery fee, on the established recovery days (instances of illness are an exception and will be submitted to the Dean's office for approval).

6. Specific competencies and skills

Professional Competencies	<ol style="list-style-type: none"> Learning the terms in the field of nutrition and dietetics; Learning fundamental knowledge about the role of nutrition; The ability to evaluate the energy and nutrient requirement of a person; To elaborate a personalized meal plan for a healthy person.
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Transversal Competencies	1. Preoccupation for the professional development by training the abilities for critical thinking by active participation to the lectures;
	2. Involvement in the scientific research by writing papers, scientific studies or scientific articles;
	3. The efficient use of the informational sources and of the resources for communication and assisted professional development (Internet portals, various types of software, databases, on-line lectures etc.).

7. Discipline/Course objectives (based on the specific competences)

7.1 Discipline/Course general objectives	Learning the fundamental knowledge about elaborating a meal plan.
7.2 Discipline/Course specific objectives	<ol style="list-style-type: none"> 1. Learning about the role of nutrition in maintaining health and in the treatment of different diseases; 2. Learning to evaluate the energy and nutrient requirement of a person; 3. Learning to elaborate a personalized meal plan for a healthy person.

8. Learning results

Knowledge	<ul style="list-style-type: none"> • The student/graduate identifies, describes and analyses principles of healthy, personalised nutrition • The student/graduate can explain topic-specific notions relating principles of healthy, personalised nutrition • The student/graduate can answer questions regarding principles of healthy, personalised nutrition
Abilities	<ul style="list-style-type: none"> • The student/graduate integrates, adapts and correctly uses specific principles of healthy nutrition • The student/graduate adequately interprets dietary patterns and identifies solutions and proposes treatment plans for different situations.
Responsability and autonomy	<ul style="list-style-type: none"> • The student/graduate coordinates, develops and supports, under appropriate supervision, prevention and treatment strategies in nutrition • The student/graduate selects appropriate bibliographic sources and analyses them critically. • The student/graduate respects the principles of academic ethics, correctly citing the bibliographic sources used. • The student/graduate demonstrates receptivity to new learning contexts. • The student/graduate demonstrates collaboration with other colleagues and teachers in carrying out teaching activities. • The student/graduate demonstrates autonomy in organizing the learning situation/context or the problem/situation to be solved. • The student/graduate demonstrates social responsibility through active involvement in student social life/involvement in events in the academic community. • The student/graduate promotes/contributes through new solutions related to the specialty field to improve the quality of life through sustainable solutions (social responsibility). • The student/graduate applies principles of ethics/professional deontology in analysing the impact on the environment of the proposed solutions in the field of nutrition. • The student/graduate demonstrates management skills in real-life situations (time management, collaboration vs. conflict).

9. Content

9.1. Teaching methods

Starting with the analysis of students' learning characteristics and their specific needs, the teaching process will explore both expository (lecture, exposition) and conversational-interactive teaching methods, based on discovery learning models facilitated by direct and indirect exploration of reality (experiment, demonstration, modeling), but also on action-based methods, such as repetition, practical activities and problem solving.

The teaching activity will use oral, interactive lectures, accompanied by rich and suggestive iconography, based on Power Point presentations or various videos that will be made available to students (Power Point presentations will be available on the university's Moodle e-learning platform). Each course will begin with a recap of the chapters already covered, with an emphasis on the concepts covered in the last course and then on the educational objectives and will end with a summary of the concepts presented. The material taught is reviewed and supplemented with the latest information relevant to the subject. The presentations use images and diagrams, so that the information is easy to understand and assimilate.

This discipline covers information and practical activities designed to support students in their learning endeavour and in developing optimal collaborative and communication relationships in a climate conducive to discovery learning.

The focus will be on practicing active listening and assertive communication skills, as well as feedback construction mechanisms, as ways of regulating behaviour in various situations and adapting the teaching approach to the learning needs of students.

The skills necessary for successful teamwork will be practiced through solving various learning tasks.

9.2 Course	Number of hours
1. Introduction. Definitions.	2
2. The aim of nutrition	2
3. Calculation of the energy requirement	2
4. Macronutrients – carbohydrates	2
5. Macronutrients –fats	2
6. Macronutrients – proteins	2
7. Macronutrients – dietary fibers, cholesterol, purines	2
8. Micronutrients – vitamins	2
9. Micronutrients – minerals	2
10. Water	2
11. Dietary assessment	2
12. Food groups	2
13. How to elaborate a meal plan	2
14. Types of diet (low fat, low carb)	2

Mandatory references:

1. Presentations (ppt format) – Moodle
2. Feather A, Randall D, Waterhouse M. Kumar & Clark's Clinical Medicine, 10th Edition. Elsevier, 2020.

Optional bibliography:

1. U.S. Department of Agriculture and U.S. Department of Health and Human Services. Dietary Guidelines for Americans, 2020-2025. 9th Edition. December 2020. Available at DietaryGuidelines.gov.
2. EFSA (European Food Safety Authority), 2017. Dietary reference values for nutrients: Summary report. EFSA supporting publication 2017:e15121. 92 pp. doi:10.2903/sp.efsa.2017.e15121
3. Sobotka L (editor). Basics in clinical nutrition. Fifth edition. Publishing House Galén Prag. www.espenbluebook.org
4. 2021 ESC Guidelines on cardiovascular disease prevention in clinical practice: Developed by the Task Force for cardiovascular disease prevention in clinical practice with representatives of the European Society of Cardiology and 12 medical societies with the special contribution of the European Association of Preventive Cardiology (EAPC). European Heart Journal, Volume 42, Issue 34, 7 September 2021, Pages 3227-3337.
5. 2019 ESC/EAS Guidelines for the management of dyslipidaemias: lipid modification to reduce cardiovascular risk: The Task Force for the management of dyslipidaemias of the European Society of Cardiology (ESC) and European Atherosclerosis Society (EAS). European Heart Journal, Volume 41, Issue 1, 1 January 2020, Pages 111-188.
6. American Diabetes Association. Standards of Medical Care in Diabetes – 2022. Diabetes Care, Volume 45, Supplement 1, January 2022.

9.3 Seminars/ Laboratory /practical activity/ projects	Teaching-learning methods	Number of hours	Practical activity done by the students
1. Introduction. Definitions.	CASE PRESENTATIONS + DEBATES Case presentations from digital virtual clinical case platforms such as Full Code (https://fullcodemedical.com/).	2	Interactive discussions related to clinical cases.
2. The aim of nutrition		2	
3. Calculation of the energy requirement		2	
4. Macronutrients – carbohydrates		2	
5. Macronutrients –fats		2	
6. Macronutrients – proteins		2	
7. Macronutrients – dietary fibers, cholesterol, purines		2	
8. Micronutrients – vitamins		2	
9. Micronutrients – minerals		2	
10. Water		2	
11. Dietary assessment		2	
12. Food groups		2	
13. How to elaborate a meal plan		2	
14. Types of diet (low fat, low carb)		2	

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1. U.S. Department of Agriculture and U.S. Department of Health and Human Services. Dietary Guidelines for Americans, 2020-2025. 9th Edition. December 2020. Available at DietaryGuidelines.gov.
2. EFSA (European Food Safety Authority), 2017. Dietary reference values for nutrients: Summary report. EFSA supporting publication 2017:e15121. 92 pp. doi:10.2903/sp.efsa.2017.e15121
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4. 2021 ESC Guidelines on cardiovascular disease prevention in clinical practice: Developed by the Task Force for cardiovascular disease prevention in clinical practice with representatives of the European Society of Cardiology and 12 medical societies with the special contribution of the European Association of Preventive Cardiology (EAPC). European Heart Journal, Volume 42, Issue 34, 7 September 2021, Pages 3227-3337.
5. 2019 ESC/EAS Guidelines for the management of dyslipidaemias: lipid modification to reduce cardiovascular risk: The Task Force for the management of dyslipidaemias of the European Society of Cardiology (ESC) and European Atherosclerosis Society (EAS). European Heart Journal, Volume 41, Issue 1, 1 January 2020, Pages 111-188.
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10. Correlations between the content of the course and the requirements of the professional field and relevant employers

The student is acquainted with the dietary treatment of different diseases that are common in the practical activity. The information and the abilities gathered will make the future physician competitive and will allow him/her to meet the European professional and educational standards.

In order to establish the curricula and to choose between different teaching/learning methods, the teachers attended the didactic workshops organized by the Romanian Society of Diabetes, Nutrition and Metabolic Diseases. The meetings had as main purposes to identify the expectations of the employers and to correlate the own curricula with that from other universities of medicine from the country.

11. Assessment

Activity type	11.1 Assessment criteria	11.2 Assessment methods	11.3 Percentage of the final grade
11.4 Course	<i>Knowledge for mark 5:</i> Basic knowledge regarding elaborating a diet <i>Knowledge for mark 10:</i> Elaborating a correct meal plan	Elaboration of a meal plan on a given topic.	50%
11.5 Laboratory/Practical activity	<i>Knowledge for mark 5:</i> Basic knowledge regarding the chosen topic <i>Knowledge for mark 10:</i> Comprehensive, detailed knowledge regarding the chosen topic	Presentation on a chosen nutrition-related topic.	50%
Basic knowledge about dietary treatment. Ability to elaborate a personalized meal plan.			

Date	Signature of the course holder	Signature of the laboratory/seminar holder
Signature of the Head of Discipline		
Date of approval in the Department	Signature of the Head of Department	