



## SUBJECT OUTLINE

### 1. Program of study description

1.1.	"CAROL DAVILA" UNIVERSITY OF MEDICINE AND PHARMACY
1.2.	FACULTY OF MEDICINE / CLINICAL DEPARTMENT 2
1.3.	DISCIPLINE: DIABETES, NUTRITION AND METABOLIC DISEASES
1.4.	DOMAIN OF STUDY: Healthcare – regulated sector within the EU
1.5.	CYCLE OF STUDIES: BACHELOR'S DEGREE
1.6.	PROGRAM OF STUDY: MEDICINE

### 2. Subject description

2.1.	Name of the subject/compulsory subject/elective subject within the discipline: Diabetes, nutrition and metabolic diseases						
2.2.	Location of the discipline: Institutul National de Diabet, Nutritie si Boli Metabolice Prof.Dr.N.C.Paulescu, Spitalul Clinic de Adulti N.Malaxa						
2.3.	Course tenured coordinator: Prof Dr Cristian Serafinceanu, Lect. Dr. Viviana Elian, Lect. Dr. Andrada Mihai						
2.4.	Practicals/clinical rotations tenured coordinator: Prof Dr Cristian Serafinceanu, Prof. Dr. Cristian Guja, Conf. Dr. Anca Pantea-Stoian, Lect. Dr. Viviana Elian, Lect. Dr. Andrada Mihai						
2.5. Year of study	5	2.6. Semester	IX, X	2.7. Type of assessment	Exam	2.8. Subject classification	Compulsory

### 3. Total estimated time (hours/semester of didactic activity) – teaching module

Number of hours per week	20	Out of which: course	8	Clinical rotation	12
Total number of hours from curriculum	20	Out of which: course	8	Clinical rotation	12
Distribution of allotted time					Hours
Study from textbooks, courses, bibliography, and student notes					16
Additional library study, study on specialized online platforms and field study					20
Preparing seminars / laboratories, assignments, reports, portfolios and essays					16
Tutoring					24
Examinations					40
Other activities					
Total hours of individual study					
Number of credit points					2

### 4. Prerequisites (where applicable)

4.1. of curriculum	
4.2. of competencies	

### 5. Requirements (where applicable)

5.1. for delivering the course	Course classroom, videoproietor	
5.2. for delivering the clinical rotation	Wards, blood glucose meters, CGMS, insulin pumps	





## 6. Acquired specific competencies

<b>Professional competencies (expressed through knowledge and skills)</b>	<ul style="list-style-type: none"> <li>- Correct diagnosis of diabetes, obesity and metabolic diseases</li> <li>- Identification of the population at risk of developing diabetes</li> <li>- Diagnosis and evaluation of main diabetes complications</li> <li>- Design and implementation of a therapeutic plan</li> <li>- Knowing and applying the appropriate preventive measures</li> <li>- Approaching health/disease problems from the perspective of the particularities of the community, in direct relation to the social, economic and/or cultural conditions of that community</li> <li>- Participation in scientific research activities</li> </ul>
<b>Transversal competencies (of role, of professional and personal development)</b>	<p>Ability to identify objectives, discipline resources, work plan, related timelines, and related risks</p> <p>The ability to work in a multidisciplinary team and the acquisition of communication and work techniques within the team and in relation to the patient</p> <p>The use of information resources and methods of interpersonal communication and professional training (internet portals, specialized software applications, databases, online courses, etc.) in English</p>

## 7. Subject learning objectives (based on the scale of acquired specific competencies)

<b>7.1. General learning objective</b>	Transferring to students the main concepts and skills in the field of metabolic-nutritional pathology, mainly in the field of diabetes and obesity. Emphasizing the significance of this pathology for current public health
<b>7.2. Specific learning objectives</b>	Acquiring the ability to identify, correctly diagnose and develop an appropriate treatment plan for the diagnosed metabolic condition Implementation of nutritional interventions specific to metabolic pathologies

## 8. Content

<b>8.1. Course</b>	<b>Teaching methods</b>	<b>Observations</b>
Course 1. Diabetes mellitus: classification, clinical forms, diagnosis, epidemiology and etiopathogenesis	Course support, interactive presentations (PowerPoint, teaching movies), questions and answers session	
Course 2. Acute complications of diabetes	Course support, interactive presentations (PowerPoint, teaching movies), questions and answers session	
Course 3. Chronic complications of diabetes	Course support, interactive presentations (PowerPoint, teaching movies), questions and answers session	
Course 4. Therapeutic management of diabetes	Course support, interactive presentations (PowerPoint, teaching movies), questions and answers session	





8.2. Clinical rotation	Teaching methods	Observations
CR 1. Clinical and biological examination protocol of the patient with diabetes. Glycemic self-monitoring. Insulin injection technique. Insulin pumps. Continuous glucose monitoring systems	Case presentations, bedside activity, practical demonstrations	
CR 2. Practical methods for assessing the cardiovascular risk of patients with diabetes	Case presentations, bedside activity, practical demonstrations	
CR 3. Assessment of nutritional status. Clinical aspects of obesity and malnutrition	Case presentations, bedside activity, practical demonstrations	
CR 4. Principles of diet therapy. Practical design of a diet	Case presentations, practical demonstrations	

#### Bibliography for course and clinical rotation

1. **Tratat de diabet Paulescu.** Editura Academiei, București, 2004.
2. **Diabetul zaharat. Manual pentru studenți, medici de familie și rezidenți.** Ionescu-Tîrgoviste C, Lichiardopol R, Guja C. Editura Ilex, București, 2007.
3. **Manual de diabetologie pentru studenți și rezidenți.** Lichiardopol R (Coord). Editura Ilex, 2011
4. **Tratat Român de Boli Metabolice.** Viorel Șerban. Ed Brumar. Timișoara. 2011
5. **Nutriție clinică umană – manual pentru studenți și rezidenți.** Cristian Serafinceanu. Ed. Medicală, București, 2012
6. **Managementul nutrițional în diabetul zaharat, bolile metabolice și alte patologii.** Gabriela Radulian. Ed. Univ. Carol Davila, București, 2016
7. **Diabetul zaharat in practica medicala.** Gabriela Radulian Ed. Univ. Carol Davila, București, 2019
8. **Recomandari de practica medicala ale Asociatiei Americane de Diabet 2022.** Diabetes Care 2022.

#### 9. Corroboration of the subject content with the expectations of the representatives of the epistemic community, professional associations, and major employers in the field of the programme of study

The discipline of Diabetes, nutrition and metabolic diseases prepares specialists whose curriculum corresponds to the needs of patients. The content of the course within the discipline Diabetes, nutrition and metabolic diseases (both from university-student training and postgraduate-residents) is adapted from year to year to include the latest news in the field, with an attractive, adapted format the permanent changes of society and its requirements. The specialty of Diabetes, nutrition and metabolic diseases has developed, offering quality care and high standards of treatment despite the difficulties the Romanian medical system is going through. The specialty Diabetes, nutrition and metabolic diseases also provides training in the field of clinical nutrition, a field not covered by any of the other medical specialties. The course content has been constantly adapted to include the professional recommendations of the Romanian Diabetes Society as well as EASD (European Association for the Study of Diabetes)





**The "Carol Davila" University of Medicine and Pharmacy Bucharest  
The Quality Assurance Commission**

**10. Assessment**

Type of activity	Assessment criteria	Assessment methods	Assessment weighting within the final grade
Course	Knowledge	Written Exam	80%
Clinical rotation	Knowledge, clinical skills	Oral Exam	20%
<b>Minimum performance standard</b>			
5 out of 10			

**Date of filing:  
05.10.2022**

**Signature of discipline  
coordinator  
Prof. Univ.Dr.Gabriela Radulian**

**Signature of course tenured  
coordinator  
Prof.Univ.Dr.Cristian Serafinceanu**

**Signature of the seminar tenured  
coordinator  
Prof. Univ.Dr.Cristian Guja**

**Date of approval in the  
Council of the Department:**

**Signature of the Head of the  
Department Clinic 2,  
Prof.Univ. Dr. Adrian Streinu-Cercel**