SUBJECT OUTLINE

1. Programme of study description

1.1.	**THE "CAROL DAVILA" UNIVERSITY OF MEDICINE AND PHARMACY**
1.2.	**THE FACULTY OF MEDICINE / THE CLINICAL DEPARTMENT 7 PEDIATRICS**
1.3.	**DISCIPLINE MEDICAL GENETICS**
1.4.	**DOMAIN OF STUDY: Healthcare – regulated sector within the EU**
1.5.	**CYCLE OF STUDIES: BACHELOR'S DEGREE**
1.6.	**PROGRAMME OF STUDY: MEDICINE**

2. Subject description

2.1.	**Name of the subject/compulsory subject/elective subject within the discipline:**						
2.2.	**Location of the discipline:**						
2.3.	**Course tenured coordinator:Prof Dr Laurentiu Camil Bohiltea Lecturer dr Viorica Radoi**						
2.4.	**Practicals/clinical rotations tenured coordinator:**						
2.5. Year of study 5		**2.6. Semester II**		**2.7. Type of assessment Written exam Essey**		**2.8. Subject classification marks**	

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

Number of hours per week	2	**Out of which: course**	2	**Clinical rotation**	
Total number of hours from curriculum	14	**Out of which: course**	2	**Clinical rotation**	
Distribution of allotted time					**Hours**
Study from textbooks, courses, bibliography, and student notes					1
Additional library study, study on specialized online platforms and field study					1
Preparing seminars / laboratories, assignments, reports, portfolios and essays					2
Tutoring					1
Examinations					1
Other activities					
Total hours of individual study					6
Number of credit points					

4. Prerequisites (where applicable)

4.1. of curriculum	
4.2. of competencies	

5. Requirements (where applicable)

5.1. for delivering the course	
5.2. for delivering the clinical rotation	

6. Acquired specific competencies

Professional competencies (expressed through knowledge and skills)	Clinical Implementation of the results of the cutting edge genetic testing techniques
Transversal competencies (of role, of professional and personal development)	

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

7.1. General learning objective	Learning the concepts of the Basic Medical Genetics
7.2. Specific learning objectives	Learning the concepts of Personalized Medicine/ Precision Medicine

8. Content

8.1. Course	**Teaching methods**	**Observations**
Course 1 Genetics in obstetrics -gynecology. Prenatal diagnosis of genetic diseases	Power Point presentation	
Course 2 Genetics in cardiology. Hereditary cardiomyopathies. Congenital heart malformations.	Power Point presentation	
Course 3 Genetics in oncology. Genetic predisposition to hereditary cancers. Pharmacogenetics in oncology	Power Point presentation	
Course 4 Genetics in neurology. Genetic diagnosis of epilepsies	Power Point presentation	
Course 5 Genetics in pediatrics. Inborn errors of metabolism Mitochondrial disorders.	Power Point presentation	
Course 6 Medical genetics vs genomic medicine.	Power Point presentation	
Course 7 The clinical utility of the genetic tests in current medical practice	Power Point presentation	

8.2. Clinical rotation	**Teaching methods**	**Observations**
CR 1		
CR 2		
...		

Bibliography for course and clinical rotation

1. **Oxford Desk Reference: Clinical Genetics and Genomics** by Helen V. Firth; Jane A. Hurst
2. **Thompson and Thompson Genetics in Medicine** by Robert L. Nussbaum; Roderick R. McInnes; Huntington F. Willard
3. **Medical Genetics** by Lynn B. Jorde; John C. Carey; Michael J. Bamshad
4.https://www.orpha.net/consor/
5.https://rarediseases.org/

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

10. Assessment

Type of activity	Assessment criteria	Assessment methods	Assessment weighting within the final grade
Course		Written Exam	50%
		Essey	50%
Clinical rotation			

Minimum performance standard
5

Date of filing | **Signature of the course tenured coordinator** | **Signature of the seminar tenured coordinator**

Date of approval in the Council of the Department: | **Signature of the Head of the Department**