

FIȘA DISCIPLINEI

1. Date despre program

1.1 Instituția de învățământ superior	UNIVERSITATEA DE MEDICINA SI FARMACIE "VICTOR BABEȘ" TIMIȘOARA
1.2 Facultatea	FACULTATEA DE MEDICINA GENERALA
1.3 Departamentul	VI
1.4 Domeniul de studii de ¹⁾	Licență
1.5 Ciclul de studii ²⁾	Licență
1.6 Programul de studii/ Calificarea	MEDICINA GENERALA

2. Date despre disciplină

2.1. Denumirea disciplinei	ELECTROCARDIOGRAPHY							
2.2 Titularul activităților de curs	Conf. univ. dr. Mornos Cristian							
2.3 Titularul activităților de laborator	Conf. univ. dr. Mornos Cristian							
2.4 Anul de studiu	IV	2.5 Semestrul	2	2.6 Tipul de evaluare	Colocviu	2.7 Regimul disciplinei	Conținut ³⁾	DC
							Obligativitate ³⁾	DO

3. Timpul total estimat (ore pe semestru al activităților didactice)

3.1 Număr de ore pe săptămână	2	3.2 din care: curs	1	3.3 laborator	1
3.4 Total ore din planul de învățământ	28	3.5 din care: curs	14	3.6 laborator	14
Distribuția fondului de timp					ore
Studiul după manual, suport de curs, bibliografie și notițe					45
Documentare suplimentară în bibliotecă, pe platformele electronice de specialitate și pe teren					20
Pregătire seminarii/ laboratoare/ proiecte, teme, referate, portofolii și eseuri					12
Tutoriat					10
Examinări					6
Alte activități					
3.7 Total ore studiu individual		97			
3.8 Total ore pe semestru		125			
3.9 Numărul de credite⁵⁾		5			

4. Precondiții (acolo unde este cazul)

4.1 de curriculum	Physiology, Pathophysiology, Medical Semiology
4.2 de competențe	Learning about the action potential, general data on electrocardiography

5. Condiții (acolo unde este cazul)

5.1 de desfășurare a cursului	<ul style="list-style-type: none"> • telephone conversations are not tolerated during the course • classroom with projector
5.2 de desfășurare a seminarului/ laboratorului/ proiectului	<ul style="list-style-type: none"> • classroom with projector

6. Competențe specifice acumulate

Competențe Profesionale	1. Understanding and interpreting a normal surface electrocardiogram 2. Understanding and interpreting a pathological surface electrocardiogram 3. Performing an electrocardiogram in different clinical situations 4. The ability to perform a specific activity in a medical unit
Competențe transversale	1. Use of knowledge and skills in new contexts and solving problems specific to professional qualification 2. Teamwork skills 3. Elaboration of projects in order to solve the specific problems of the domain 4. Making decisions regarding the results obtained 5. Openness for further education, autonomy and responsibility, pursuing professional ethics

7. Obiectivele disciplinei (reieșind din competențele specifice acumulate)

7.1 Obiectivul general al disciplinei	The main objectives of the discipline are the understanding of the surface electrocardiogram, the development of logical thought in the electrocardiographic analysis adapted to the different situations that may occur in the daily practice and
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	the acquisition of practical skills necessary for realising this investigation.
7.2 Obiectivele specifice	-Understanding the electrocardiogram in emergency situations -Knowledge and correct use of electrocardiographic systems -Use of dedicated computer tools -Correct interpretation of the results -Drawing up a medical report

8. Conținuturi

8.1 Curs	Metode de predare	Număr de ore	Observații
General data regarding the electrical activity of the heart	oral presentation + multimedia, discussions, explanations	1 hour	
Making a surface electrocardiogram, performing a stress test, recording the Holter EKG and an amplified electrocardiogram		1 hour	
Electrocardiography in acute and chronic coronary heart disease		2 hours	
Electrocardiography in tachyarrhythmias (sinus tachycardia, supraventricular arrhythmias, ventricular arrhythmias)		2 hours	
Electrocardiography in bradyarrhythmias (sinus bradycardia, sick sinus node syndrome, atrioventricular blocks, paced rhythm)		2 hours	
Electrocardiography in cardiomyopathies (hypertrophic cardiomyopathy, restrictive cardiomyopathy, dilated cardiomyopathy, noncompactation cardiomyopathy)		1 hour	
Electrocardiography in systemic and pulmonary hypertension, pulmonary embolism, myocarditis and pericarditis		1 hour	
Electrocardiography in branch blocks and particular situations (rare)		1 hour	
Electrocardiography in congenital and hereditary disorders		1 hour	
Difficult differential diagnosis in electrocardiography		1 hour	
Recapitulative course. Tips and Tricks.		1 hour	
Mandatory bibliography: 1. Sorin Pescariu. Cardiology course. Ed II, 2014 2. Harrison's Principles of Internal Medicine. 19th (2015) 3. The taught lectures 4. Electrocardiography course for students. Del. I. Drăgulescu, S. Pescariu, A. Ionac, A. Fluture, B. Mut, H. Branea, C. T. Luca, M. Știubei, D. Cozma. Brumar Timisoara Publishing House, 1998.			
8.2 Seminar/ Laborator /stagiu/ proiect	Metode de predare-învățare	Număr de ore	Observații
General data regarding the electrical activity of the heart	interactive discussions, practical applications, calculations, interpretation of results, drawing up a medical report	1 hour	
Making a surface electrocardiogram, performing a stress test, recording the Holter EKG and an amplified electrocardiogram		1 hour	
Reading the electrocardiograms of patients with acute and chronic coronary heart disease		2 hours	
Interpretation of electrocardiograms of patients with tachyarrhythmias (sinus tachycardia, supraventricular arrhythmias, ventricular arrhythmias)		2 hours	
Interpretation of electrocardiograms of patients with bradyarrhythmias (sinus bradycardia, sick sinus node syndrome, atrioventricular blocks, paced rhythm)		2 hours	
Interpretation of electrocardiograms of			

patients with cardiomyopathies (hypertrophic cardiomyopathy, restrictive cardiomyopathy, dilated cardiomyopathy, noncompaction cardiomyopathy)		1 hour	
Interpretation of electrocardiograms of patients with systemic and pulmonary hypertension, pulmonary embolism, myocarditis and pericarditis		1 hour	
Interpretation of electrocardiograms of patients with in branch blocks and particular situations (rare)		1 hour	
Interpretation of electrocardiograms of patients with congenital and hereditary disorders		1 hour	
Interpretation of electrocardiograms of patients with difficult differential diagnosis		1 hour	
Tips and Tricks.		1 hour	
Mandatory bibliography: 1. Sorin Pescariu. Cardiology course. Ed II, 2014 2. Harrison's Principles of Internal Medicine. 19th (2015) 3. The taught lectures 4. Electrocardiography course for students. Del. I. Drăgulescu, S. Pescariu, A. Ionac, A. Fluture, B. Mut, H. Branea, C. T. Luca, M. Știubei, D. Cozma. Brumar Timisoara Publishing House, 1998.			

9. Coroborarea conținuturilor disciplinei cu așteptările reprezentanților comunităților epistemice, asociațiilor profesionale și angajatori reprezentativi din domeniul aferent programului

The content of the discipline sheet is evaluated periodically within the university by correlating the basic curriculum with information received from students, graduates, MA and employers.

10. Evaluare

Tip activitate	10.1 Criterii de evaluare	10.2 Metode de evaluare	10.3 Pondere din nota finală
10.4 Curs	<p><i>Knowledge for grade 5:</i></p> <ul style="list-style-type: none"> - knowing the waves on the normal electrocardiogram - knowing the electrocardiographic aspects of acute myocardial infarction - knowing the electrocardiographic aspects of pulmonary embolism - knowing the electrocardiographic aspects of atrial and ventricular fibrillation - knowing the electrocardiographic aspects of complete AV block - knowing the electrocardiographic aspects of paroxysmal supraventricular tachycardia <p><i>Knowledge for grade 10:</i> All notions presented at the course</p>	Grid test, with a maximum percentage of 35% of simple answer questions type combined with editorial topics	60%

10.5 Laborator/Stagiu	<p><i>Knowledge for grade 5:</i></p> <ul style="list-style-type: none"> - Correct interpretation of the waves on the normal electrocardiogram - Correct interpretation of electrocardiographic aspects of acute myocardial infarction - Correct interpretation of electrocardiographic aspects of pulmonary embolism - Correct interpretation of electrocardiographic aspects of atrial and ventricular fibrillation - Correct interpretation of the electrocardiographic aspects of complete AV block - Correct interpretation of electrocardiographic aspects of paroxysmal supraventricular tachycardia <p><i>Knowledge for grade 10:</i> The ability to perform all the operations included in the laboratory theme and interpret the results obtained.</p>	Interpretation of surface electrocardiograms 40%
10.6 Standard minim de performanță		
- promotion of the theoretical and practical exam at the end of the semester (grade 5) - fulfillment of all school obligations according to the regulation of the discipline.		

Data completării	Semnătura titularului de curs Conf. Dr. Cristian Mornos	Semnătura titularului de laborator/stagiu Conf. Dr. Cristian Mornos
30.03.2023	Semnătura șefului de disciplină Prof. Dr. Adina Ionac	
Data avizării în departament	Semnătura directorului de departament Prof. Dr. Constantin T. Luca	

Notă:

- 1) Domeniul de studii - *se alege una din variantele:* Licență/ Masterat/ Doctorat (**se completează conform cu Nomenclatorul domeniilor și al specializărilor/ programelor de studii universitare în vigoare**) ;
- 2) Ciclu de studii - *se alege una din variantele:* Licență/ Master/ Doctorat;
- 3) Regimul disciplinei (conținut) - *se alege una din variantele:* **DF** (disciplină fundamentală)/ **DD** (disciplină din domeniu)/ **DS** (disciplină de specialitate)/ **DC** (disciplină complementară) - *pentru nivelul de licență;* **DAP** (disciplină de aprofundare)/ **DSI** (disciplină de sinteză)/ **DCA** (disciplină de cunoaștere avansată) - *pentru nivelul de masterat;*
- 4) Regimul disciplinei (obligativitate) - *se alege una din variantele:* **DI** (disciplină obligatorie)/ **DO** (disciplină opțională)/ **DFac** (disciplină facultativă);
- 5) Un credit este echivalent cu 25 – 30 de ore de studiu (activități didactice și studiu individual).
- 6) Pentru specializările și/sau disciplinele a căror tematică se regăsește în bibliografia de rezidențiat, aceasta devine obligatorie.