

DISCIPLINE SHEET**ACADEMIC YEAR****2022-2023****1. DATA ABOUT THE STUDY PROGRAM**

1.1 Institution of higher education	UNIVERSITY OF MEDICINE AND PHARMACY OF CRAIOVA
1.2 Faculty	MEDICINE
1.3 Department	4
1.4 Study Domain	HEALTH
1.5 Study cycle	LICENCE
1.6 Study program/ Qualification	MEDICINE

2. DATA ABOUT THE DISCIPLINE

2.1 DISCIPLINE NAME		CLINICAL PHARMACOLOGY AND TOXICOLOGY		
2.2. Discipline code		MED4113		
2.3 The holder of course activities		Associate professor Andreea Lili Bărbulescu		
2.4 The holder of seminar activities		-		
2.5. Academic degree		lecturer		
2.6. Employment (base norm/associate)		BASE NORM		
2.7. Year of study	IV	2.8. Semester	II	2.9. Course type (content) 2.10. Regime of discipline (compulsoriness)
				CDD

3. THE ESTIMATED TOTAL TIME (teaching hours per semester)

3.1 Number of hours per week	1	3.2 From which course	1	3.3 seminary/laboratory	-
3.4 Total hours in curriculum	14	3.5 From which course	14	3.6 seminary/laboratory	-
Time found distribution (hours)					
Study from manual, course support, bibliography, and notes					4
Additional documentation in the library, specialized electronic platforms and, on the field					2
Training seminars / labs, homework, reports, portfolios, and essays					2
Tutoring					1
Examinations					1
Other activities, counselling, student scientific programs					1
3.7 Total hours of individual study	11				
3.9 Total hours per semester	25				
3.10 Number of credits	1				

4. PREREQUISITES (where appropriate)

4.1 curriculum	Students must have a good knowledge of physiology, physiopathology, biochemistry, medical and surgical semiology
4.2 competency	-

5. CONDITIONS (where appropriate)

5.1. of course deployment	Lecture Hall with projector / online
5.2. of seminary/ lab deployment	-

6. SPECIFIC COMPETENCES ACCRUED

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PROFESSIONAL COMPETENCES	<p>C1 – To be able to identify the illness and to determine the correct diagnosis of the disease (diseases).</p> <p>C4 – To address the health problems from the perspective of community specifics, demonstrating knowledge of community factors that influence individual, community and public health,</p> <p>C5 - To initiate and conduct a scientific research</p>
TRANSVERSAL COMPETENCES	<p>CT1. Autonomy and responsibility</p> <ul style="list-style-type: none"> • the acquisition of moral reference points, the formation of professional and civic attitudes, that will allow to the students to be fair, honest, helpful, understanding, nonconflictual, to cooperate and to be comprehensive in the face of suffering, to be available to help people, and to be interested in community development; • to know, to respect and to contribute to the development of moral values and professional ethics; • to learn how to recognize the problems when they arise, and provide solutions for solving them. <p>CT2. Social interaction</p> <ul style="list-style-type: none"> • to recognize and to have respect for diversity and multiculturalism; • to have or to learn how to develop teamwork skills; • to communicate orally and in writing the manner of work requirements, the obtained results, to consult with the team; • to engage themselves in voluntary activities, to know the essential problems of the community. <p>CT3. Personal and professional development</p> <ul style="list-style-type: none"> • to have opening to lifelong learning; • to be aware for self-study as a basis of personal autonomy and professional development; • to derive the optimum and creative potential in their own collective activities; • to know how to use information and communication technologies.

7. DISCIPLINE OBJECTIVES (based on the grid of specific competences acquired)

7.1 The general objective of the discipline	<ul style="list-style-type: none"> - Understanding the notion of clinical pharmacology and clinical toxicology. - Knowing to initiate and conduct a clinical trial. - Getting used to the notion of pharmacovigilance
7.2 The specific objectives of the discipline	<ul style="list-style-type: none"> - Adjusting single and multiple therapy to individual patient. - Knowing the specific action mechanism of the drugs. - Following the conformity between the trials results and clinical practice. - Assessing adverse effects of the drugs and how to avoid them. - Adjusting specific therapy to associated conditions. - Understanding the notion of clinical toxicology, especially the addictive drugs.

8. CONTENTS

8.1 Course (content units)	Hours
<p>I. Drug poisoning</p> <ul style="list-style-type: none"> - General principles of toxic mechanisms. - Clinical aspects of drug poisonings. Possible correlations between symptoms and type of drug. - General therapeutical principles of drug poisoning. - Aspects of specific antidotes. - Examples of drug toxicity (Central nervous system depressants, salicylic acid related agents, acetaminophen, cocaine, methanol etc). 	4
<p>II. Drug poisonings that can be life threatening</p> <ul style="list-style-type: none"> - Non cardiogenic pulmonary edema - Cerebral edema - Drug seizures - Drug arrhythmias 	2
<p>III. Anaphylactic reactions</p> <ul style="list-style-type: none"> - General anaphylactic mechanisms of drugs . - Clinical aspects and therapeutical measures. - Anaphylactic reactions in hepatology, nephrology, hematology and dermatology. Drug fever. 	1
<p>IV. Pharmacology of cardio-vascular system</p> <ul style="list-style-type: none"> - Cardiac glycosides - Antiarrhythmic drugs. - Antihypertensive agents - Vasodilators and treatment of angina pectoris. 	2
<p>V. Principles of glucocorticoid therapy</p>	1
<p>VI. Therapeutical principles of antibiotics and antimicrobial chemotherapy</p>	1
<p>VII. General principles of drug associations</p>	1

VIII. Clinical trials - General principles - Ethics and legislation - Management of clinical trials	2
BIBLIOGRAPHY 1. Farmacologie curs. Andrei Tica (sub red.) EMU 2002. 2. Course. 3. Farmacologie, curs, ediția a II-a. Corneliu Cristian Georgescu. EMU 2013. 4. Farmacologie. Andrei Tica, Victor Voicu (sub red.). EMU 2004. 5. Farmacologie. Ediția a II-a revizuita si adaugita. Ion Fulga. Editura Medicală 2017. 6. Farmacologie Generală, ediția a II-a. Nicoleta Auelia Cristea. Editura Didactică și Pedagogică 2018. 7. Manual de Farmacoterapie, ediția a 10-a. Wells BG, Schwinghammer TL, DiPiro JT, DiPiro CV. Editura Prior & Books 2019. 8. Farmacopeea Română. Ediția a X-a. Editura Medicală 2020. 9. Basic and Clinical Pharmacology, 14th edition. Bertram Katzung (under red.); McGraw-hill Ed., 2017 10. The pharmacologic basics of therapeutics. Goodman & Gillman. 13th edition. Mc Graw Hill education 2018.	
8.2 Practical work (topics / themes)	
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9. CORROBORATING THE DISCIPLINE CONTENT WITH THE EXPECTATIONS OF EPISTEMIC COMMUNITY REPRESENTATIVES, PROFESSIONAL ASSOCIATIONS AND EMPLOYEE REPRESENTATIVES RELATING TO THIS PROGRAM

<ul style="list-style-type: none"> The knowledges and the attitudes learned on this discipline are offering the basics of therapeutics for the pathological processes that will be studied in other disciplines and it is the basis for comprehension and understanding and learning of every medical attitude regarding the prevention, curative and the recovery processes

10. METHODOLOGICAL LANDMARKS

Types of activity	Techniques of teaching / learning, materials, resources: lecture, interactive group work, learning based problems / projects audio-video recordings, etc.
Course	The lectures are based on detailing the information presented in digital way, in the same time with a permanent dialog with the students. Modern methods: online teaching. In case of special situations (alert states, emergency states, other types of situations that limit the physical presence of people) the activity can be carried out online using computer platforms approved by the faculty / university. The online education process will be adapted accordingly to ensure the fulfillment of all the objectives set out in the discipline sheet.
Individual study	Bibliography study. For the online version: lecture, debate, problematization based on materials provided in advance.

11. RECOVERY PROGRAM

Absences recoveries	No. absences that can recover	Location of deployment	Period	In charge	Scheduling of topics
	-	-	-	-	-
Schedule consultations / Students' Scientific Program	1h/week	Pharmacology Department, Faculty of Medicine, Main building, Second floor	Weekly	Lecture holders	After students' needs and the curriculum of the
Program for students poorly trained	1h/week	Pharmacology Department, Faculty of Medicine, Main building, Second floor	Weekly	Lecture holders	After students' needing and according with the less understood chapters

12. ASSESMENT

Activity	Types of assesment	Method of evaluation	Percentage from final grade
Lecture	Formative assesment through essays, projects and surveys during the semester Summative assesment during the exam	Multiple Choice Questions Answering System (MCQ)/MCQ with the help of the IT platform in the online version.	100%
Practical work	-	-	-

Periodic assesment	Orally		-
Assesment of individual activity	Periodically, during the semester		-
Minimum performance standard	At least 50% for each component of the evaluation		
13. GUIDANCE AND COUNSELLING PROGRAMS			
Professional guidance and counselling programs (2 hours/monthly)			
Scheduling the hours	Location	In charge	
Every last Friday of the month	Pharmacology Discipline, Second Floor, UMF /online	Lecture holders	

Endorsement date in the department: 28.09.2022

**Department Director,
Prof. Paul Mitrut**

**Coordinator of study program,
Prof. Marius Eugen CIUREA**

**Discipline holder,
Assoc. prof. Andreea Lili BĂRBULESCU**