

**DISCIPLINE SHEET****ACADEMIC YEAR****2022 - 2023**

<b>1. DATA ABOUT THE STUDY PROGRAM</b>	
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

<b>2. DATA ABOUT THE DISCIPLINE</b>					
2.1 DISCIPLINE NAME		INTERNAL MEDICINE-PNEUMOLOGY, PHTIZIOLOGY			
2.2. Discipline code		MED 4101.A			
2.3 The holder of course activities		Professor dr Streba Costin, Associate Professor dr. Biciusca Viorel, Lecturer dr. Trasca Diana, Lecturer dr. Mihai Olteanu, Lecturer dr. Popescu Alin Silviu Iulian			
2.4 The holder of seminar activities		Professor dr Streba Costin, Associate Professor dr. Biciusca Viorel, Lecturer dr. Trasca Diana, Lecturer dr. Mihai Olteanu, Lecturer dr. Popescu Alin Silviu Iulian , Lecturer dr. Cioboata Ramona, Assistant Professor Calaraşu Cristina, Assistant Professor Padureanu Rodica			
2.5.Academic degree		<b>Course:</b> Professor, Associate Professor, Lecturer <b>Clinical stage:</b> Professor, Associate Professor, Lecturer, Assistant Professor			
2.6. Employment (base norm/associate)		Base norm/Associate			
2.7. Year of study	<b>IV</b>	2.8. Semester	<b>I</b>	2.9. Course type (content) 2.10. Regime of discipline (compulsoriness)	<b>CSD</b>

<b>3. THE ESTIMATED TOTAL TIME (teaching hours per semester)</b>					
3.1 Number of hours per week	<b>8,5</b>	3.2 From which course	<b>2</b>	3.3 seminary/laboratory	<b>6,5</b>
3.4 Total hours in curriculum	<b>119</b>	3.5 From which course	<b>28</b>	3.6 seminary/laboratory	<b>91</b>
Time found distribution (hours)					
Study from manual, course support, bibliography, and notes					<b>28</b>
Additional documentation in the library, specialized electronic platforms and, on the field					<b>8</b>
Training seminars / labs, homework, reports, portfolios, and essays					<b>8</b>
Tutoring					<b>6</b>
Examinations					<b>6</b>
Other activities, counselling, student scientific programs					<b>6</b>
3.7 Total hours of individual study	<b>56</b>				
3.9 Total hours per semester	<b>175</b>				
3.10 Number of credits	<b>7</b>				

<b>4. PREREQUISITES (where appropriate)</b>	
4.1 curriculum	Students must have basic knowledge of respiratory system epidemiology, anatomy, physiopathology.
4.2 competency	-

<b>5. CONDITIONS (where appropriate)</b>	
5.1. of course deployment	Analytic program correspondent/ online platform.
5.2. of seminary/ lab deployment	Precedent preparation of practical labs through individual study/ simulation center/ online platform

<b>6. SPECIFIC COMPETENCES ACCRUED</b>	
<b>PROFESSIONAL COMPETENCES</b>	<p><b>C1</b> - Identifying the state of ill-health and accurately diagnosing the condition(s).</p> <p><b>C2</b> - Preparing and applying an adequate treatment plan for the identified condition(s).</p> <p><b>C3</b> - Assessing correctly the risk of disease or the context of the occurrence of an individual/collective disease, followed by the selection and implementation of adequate prophylactic measures.</p> <p><b>C4</b> - Approaching the health/ill-health issues from the point of view of the characteristics of the community, in direct relation with the social, economic and/or cultural conditions of the respective community.</p> <p><b>C5</b> - Initiating and performing scientific research and/or training activity in the respective domain of competence.</p> <p><b>C6</b> - Performing efficiently and skillfully the managerial tasks required by certain professional positions.</p>
<b>TRANSVERSAL COMPETENCES</b>	<p><b>CT1.</b> Autonomy and responsibility</p> <ul style="list-style-type: none"> <li>• 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;</li> <li>• to know, to respect and to contribute to the development of moral values and professional ethics;</li> <li>• to learn how to recognize the problems when they arise, and provide solutions for solving them.</li> </ul> <p><b>CT2.</b> Social interaction</p> <ul style="list-style-type: none"> <li>• to recognize and to have respect for diversity and multiculturalism;</li> <li>• to have or to learn how to develop teamwork skills;</li> <li>• to communicate orally and in writing the manner of work requirements, the obtained results, to consult with the team;</li> <li>• to engage themselves in voluntary activities, to know the essential problems of the community.</li> </ul> <p><b>CT3.</b> Personal and professional development</p> <ul style="list-style-type: none"> <li>• to have opening to lifelong learning,</li> <li>• to be aware for self-study as a basis of personal autonomy and professional development;</li> <li>• to derive the optimum and creative potential in their own collective activities;</li> <li>• to know how to use information and communication technologies.</li> </ul>

<b>7. DISCIPLINE OBJECTIVES (based on the grid of specific competences acquired)</b>	
7.1 The general objective of the discipline	The objective of this discipline is to provide the students of the fourth year theoretical support, information and logistical support to understand respiratory diseases and current treatment of this pathology
7.2 The specific objectives of the discipline	<p>The curricula adapted to European standards of quality, teaching methods and evaluation used by student involvement in research and evaluation of patients, pulmonology discipline aims to build cognitive skills, habits and attitudes that form the basis of any act medical preventive, diagnostic, curative and rehabilitation. Upon completion of pulmonology discipline the student will be able to acquire:</p> <p>Cognitive skills that will enable:</p> <ul style="list-style-type: none"> <li>• to describe respiratory diseases in order to understand and explain their origin (concepts of epidemiology, pathophysiology, pathology and semiology of respiratory diseases);</li> <li>• reasoning algorithm to learn the diagnosis of disease;</li> <li>• to acquire skills and competencies needed to assess the role of symptoms and syndromes in the diagnosis of some of the most important respiratory diseases;</li> <li>• to interpret laboratory exploration necessary to support the diagnosis of respiratory disease;</li> <li>• to know the positive and differential diagnosis formulation methodology, complications, evolution and prognosis of respiratory diseases;</li> <li>• to learn the principles and methods of medical treatment in these conditions;</li> <li>• to integrate theoretical and practical knowledge acquired discipline pneumology with those obtained from other fundamental disciplines and use them as a platform for clinical training;</li> <li>• to communicate clearly, the gained knowledge and the results achieved. <ul style="list-style-type: none"> <li>▪ to use and understand general knowledge of epidemiological aspects related to tuberculosis (epidemiometrics indicators) regarding the sources and the way that infection is disseminated.</li> <li>▪ to understand the debut and evolution types of the disease.</li> <li>▪ to use the essential measure of prevention and stopping the dissemination of the infection.</li> </ul> </li> <li>▪ The student will know the necessity of antituberculosis epidemiological fight in</li> </ul>

the day by day activity and the efficacy conditions of the National Antituberculosis Program.

Practical skills that will enable:

- to perform a complete clinical examination of the patient with respiratory disease;
- to recognize manifestations of respiratory diseases and syndromes to fit in;
- to virtually all the necessary steps to achieve positive and differential diagnosis formulation: history, physical examination, interpretation of clinical data, display and interpretation of exploration;
- to prepare treatment plan and the criteria and parameters for monitoring treatment.
- to argue and find clinical features of each case; to apply basic medical knowledge in medical practice;
- to organise the workshop: make a team, to divide tasks, to collaborate, to make known the requirements, to prepare the documents, to follow a given protocol, to register, communicate and discuss the results.
- to use the special physiology materials and devices.
- to understand correctly the epidemiological indicators that evaluate the tuberculosis endemicity.
- to perform and read the tuberculin test.
- to perform a BCG vaccination and to interpret post-vaccinal scar.
- to understand the result of the bacteriological test.
- to make an epidemiological investigation
- to perform a correct spirogram – registering volumes, capacities and pulmonary flow.
- to complete DOT sheet and to know the adverse reaction of the drugs.
- to interpret a thoracic X-Ray.

Attitudes that will enable them:

- to be open to acquiring moral guidelines, training of professional and civic attitudes that enable students to be fair, honest, non-confrontational, cooperative, sympathetic to the suffering, willing to help people interested in the developer community;
- to know, respect and contribute to the development of moral values and professional ethics;
- to learn to recognize when a problem arises and provide responsible solutions to solve it;
- to recognize and have respect for diversity and multiculturalism;
- to have or learn to develop teamwork skills;
- to communicate orally and in writing requirements, how to work, results, consult with the team;
- to get involved in volunteering, to know the essential problems of the community;
- to be open to lifelong learning;
- to appreciate the need of individual study as the basis of personal autonomy and professional development;
- to optimally exploit its creative potential in collective activities; to know how to use information and communication technology;
- to have the initiative to engage in educational and scientific activities of the discipline.

<b>8. CONTENTS</b>	
<b>8.1 Course (content units)</b>	<b>Nr. hours</b>
C.1. Pulmonary Anatomy. Bronchial endoscopy with complementary diagnostic methods. Lung defense mechanism. Acute tracheobronchitis.	2
C.2. COPD	2
C.3. Asthma	2
C.4. Bronchopulmonary Tumors.	2
C.5. Community acquired pneumonia.	2
C.6. Main types of pneumonias.	2
C.7. Diffuse lung disease	2

C.8. Lung abscess. Bronchiectasis.	2
C.9. The tuberculosis pathogen agent; Tuberculosis epidemiology. Tuberculosis etiopathogeny and general pathology; Tuberculosis discovery methods	2
C.10. Primary tuberculosis (tuberculosis primeinfection). The adult pulmonary tuberculosis	2
C.11. The tuberculosis treatment. Posttuberculosis syndromes. Extrapulmonary tuberculosis; Tuberculosis and other morbid conditions; National Tuberculosis Control Program	2
C.12. Pleural effusion	2
C.13. Pulmonary thromboembolism. Cor pulmonale.	2
C.14. Respiratory failure. Long term oxygen therapy LTOT. Sleep Apnea Syndrome. Acute Respiratory Distress Syndrome in the Adult.	2
<b>Bibliography</b>	
<ol style="list-style-type: none"> <li>1. Kumar și Clark. Medicină clinică. Ediția a 10-a aniversară. Sub coord L Azamfirei, AD Buzoianu, DI Gheonea, Ed Hipocrate, București, 2021.</li> <li>2. Tuberculoza. Ghid de lucrari practice. Sub redactia Ileana Bazavan. Editura Medicală Universitară, Craiova, 2017, ISBN 978-973-106-253-2.</li> <li>3. Ghid metodologic de implementare a programului național de prevenire, supraveghere și control al tuberculozei și altor micobacterioze, Bucuresti 2022.</li> <li>4. Medicina Interna – Pneumologie. Sub redactia Mimi Nitu. Editura Medicală Universitară, Craiova 2019, ISBN: 978-973-106-306-5.</li> <li>5. Ghid pentru managementul astmului bronsic – 2020 Global Initiative for Asthma, <a href="http://www.ginasthma.org">www.ginasthma.org</a>.</li> <li>6. Bogdan Miron. „Pneumologie”, Editura Carol Davilla, București, 2008.</li> </ol>	
<b>8.2 Practical work (topics/ themes)</b>	
PW 1-4. The Clinical Exam and the Medical Chart. Major Signs and Symptoms in Respiratory Pathology. Major Syndromes in Pneumology: Bronchic Syndrome. The bacteriological investigation in fisiology.	12+1
PW 5-8 Major Syndromes in Pneumology: Hyperinflation and Condensation Syndromes, Pleural and Vascular Syndromes. Identification of tuberculosis infection condition.	12+1
PW 9-12 Interpretation of imaging, functional, morphological and etiological explorations in the context of a respiratory pathology. BCG vaccination.	12+1
PW 13-16 The notions of antibiotic therapy, bronchodilator and inhalation therapy, corticotherapy, antitussive and expectorant therapy. Clinical and radiological aspects in pulmonary tuberculosis.	12+1
PW 17-20 The clinical case presentation methodology. Case presentation of a patient with bronchial disease (COPD, asthma, bronchial cancer), parenchymal (pneumonia, diffuse pulmonary fibrosis). Antituberculosis treatment..	12+1
PW 21-24 The clinical case presentation methodology. Case presentation of a patient with bronchial (COPD, asthma, bronchial cancer), parenchymal diseases (pneumonia, diffuse pulmonary fibrosis). Antituberculosis treatment.	12+1
PW. 25-28 Case presentation of a patient with vascular disease (pulmonary thromboembolism, chronic pulmonary heart disease), pleural (pleurisy). Evolution under antituberculosis treatment.	12+1
<b>Bibliography</b>	
<ol style="list-style-type: none"> <li>1. Kumar și Clark. Medicină clinică. Ediția a 10-a aniversară. Sub coord L Azamfirei, AD Buzoianu, DI Gheonea, Ed Hipocrate, București, 2021.</li> <li>2. Tuberculoza. Ghid de lucrari practice. Sub redactia Ileana Bazavan. Editura Medicală Universitară, Craiova, 2017, ISBN 978-973-106-253-2.</li> <li>3. Ghid metodologic de implementare a programului național de prevenire, supraveghere și control al tuberculozei și altor micobacterioze, Bucuresti 2022.</li> <li>4. Medicina Interna – Pneumologie. Sub redactia Mimi Nitu. Editura Medicală Universitară, Craiova 2019, ISBN: 978-973-106-306-5.</li> <li>5. Ghid pentru managementul astmului bronsic – 2020 Global Initiative for Asthma, <a href="http://www.ginasthma.org">www.ginasthma.org</a>.</li> <li>6. Bogdan Miron. „Pneumologie”, Editura Carol Davilla, București, 2008.</li> </ol>	

## **9. CORROBORATING THE DISCIPLINE CONTENT WITH THE EXPECTATIONS OF EPISTEMIC COMMUNITY REPRESENTATIVES, PROFESSIONAL ASSOCIATIONS AND EMPLOYEE REPRESENTATIVES RELATING TO THIS PROGRAM**

- The discipline of pneumology is a specialty discipline, and constitutes an important part of internal medicine - knowledge of it being mandatory for a student to become a medic.
- The knowledge, practical skills and attitudes learnt here offer a solid base for an entire range of specialties (internal medicine, general practice, pneumology etc) and constitute a fundament for understanding and learning any preventative, diagnostic, curative or recuperatory medical act.

<b>10. METHODOLOGICAL LANDMARKS</b>	
Types of activity	Teaching Techniques / learning materials and resources:
*Course	The following methods are used in combination: lecture, debate, heuristic conversation.
*Practical work	The following methods are used in combination: case presentation, practical applications, case study, projects
Individual study	Before each course and each practical work.
* 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 <b>online</b> using computer platforms approved by the faculty/university. The online education process will be adapted accordingly to ensure the fulfillment of all the objectives provided in the discipline file.	

<b>11. RECOVERY PROGRAM</b>					
	<b>No. absences that can be recovered</b>	<b>Location of deployment</b>	<b>Period</b>	<b>In charge</b>	<b>Scheduling of topics</b>
Absences recoveries	<b>5</b>	Clinical Sections PNF I+II, Clinical Hospital „Victor Babes”, Craiova Medical Clinic I, Clinical Hospital„Filantropia” Craiova	Friday/weekly	Group Assistant	Chronologically, 1 theme/day
Schedule consultations / Students' Scientific Program	<b>2h/week</b>	Clinical Sections PNF I+II, Clinical Hospital „Victor Babes”, Craiova Medical Clinic I, Clinical Hospital„Filantropia” Craiova	Weekly	All Pedagogical Personnel	Theme of the respective week
Program for students poorly trained	<b>2h/semester</b>	Clinical Sections PNF I+II, Clinical Hospital „Victor Babes”, Craiova Medical Clinic I, Clinical Hospital„Filantropia” Craiova	Weekly	All Pedagogical Personnel	Theme of the respective week

<b>12. ASSESSMENT</b>			
<b>Form of Activity</b>	<b>Types of assessment</b>	<b>Method of evaluation</b>	<b>Percentage of Final Grade</b>
<b>Course</b>	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.	50% (40% pneumology + 10% ftisiology)
<b>Practical work</b>	Formative assesment through Multiple Choice Questions Answering System (MCQ) or/and descriptive, projects, survey during the semester. Periodic assesment during the semester Summative assesment during the exam	Oral/oral with the help of the video platform in the online version.	40% (32% pneumology + 8% ftisiology)
<b>Periodic verification</b>	Written/oral with the help of the IT platform in the online version.	Written/oral with the help of the IT platform in the online version.	10% (8% pneumology + 2% ftisiology)
<b>Periodic assesment</b>	-	-	-
<b>Minimum performance standard</b>	At least 50% for each component of the evaluation		

<b>13. GUIDANCE AND COUNSELLING PROGRAMS</b>		
<b>Professional guidance and counselling programs (2 hours/monthly)</b>		
<b>Scheduling the hours</b>	<b>Location</b>	<b>In charge</b>
Friday/weekly	Clinical Sections PNF I+II, Clinical Hospital „Victor Babes”, Craiova Medical Clinic I, Clinical Hospital,„Filantropia” Craiova	All pedagogical personnel

**Endorsement date in the department: 04.09.2022**

**Department Director,  
Prof. Mitruț Paul**

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

**Discipline holder,  
Prof. Viorel BICIUȘCĂ**