

**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	<b>MEDICINE</b>
1.3 Department	3
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		<b>REUMATOLOGY THERAPEUTIC AND DIAGNOSTIC TECHNIQUES</b>		
2.2. Discipline code		MED5214.1		
2.3 The holder of course activities		Lecturer Dinescu Ștefan Cristian		
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	<b>V</b>	2.8. Semester	<b>II</b>	2.9. Course type (content) 2.10. Regime of discipline (compulsoriness)
				<b>CRD</b>

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

3.1 Number of hours per week	<b>1</b>	3.2 From which course	<b>1</b>	3.3 seminary/laboratory	-
3.4 Total hours in curriculum	<b>14</b>	3.5 From which course	<b>14</b>	3.6 seminary/laboratory	-
Time found distribution (hours)					
Study by manual, course support, bibliography, and notes					<b>10</b>
Additional documentation in the library, specialized electronic platforms and, on the field					<b>10</b>
Training seminars / labs, homework, reports, portfolios, and essays					<b>10</b>
Tutoring					-
Examinations					<b>2</b>
Other activities, counselling, student circles					<b>4</b>
3.7 Total hours of individual study	<b>36</b>				
3.9 Total hours per semester	<b>50</b>				
3.10 Number of credits	<b>2</b>				

**4. PREREQUISITES** (where appropriate)

4.1 curriculum	-
4.2 competency	-

**5. CONDITIONS** (where appropriate)

5.1. of course deployment	-
5.2. of seminary/ lab deployment	-

**6. SPECIFIC COMPETENCES ACCRUED**

<b>PROFESSIONAL COMPETENCES</b>	<b>C1</b> -to identify disease status and establish the correct diagnosis of the diseases
	<b>C4</b> -to address health issues in terms of specific terms of community structure in relations to the social, economic and/or cultural communities that own
	<b>C5</b> –to initiate and conduct a scientific research and/or formative in own field of competence

<b>TRANSVERSAL COMPETENCES</b>	<p><b>CT1-Autonomy and responsibility:</b></p> <ul style="list-style-type: none"> <li>Acquisition of moral guidelines, training of professional and civic attitudes, allowing students to be fair, honest, non-conflictual, cooperative, sympathetic to suffering, available to help peoples, interested in community development</li> <li>To know, respect and contribute to the development of moral values and professional ethics</li> <li>To learn to recognize when a problem arises and provide responsible solutions to solve it</li> </ul> <p><b>CT2-Social interaction:</b></p> <ul style="list-style-type: none"> <li>To recognize and have respect for diversity and multiculturalism</li> <li>To have or learn to develop team working skills</li> <li>To communicate orally and writing requirements, working methods, results, to consult with his team</li> <li>To get involved in volunteering, to know critical community issues</li> </ul> <p><b>CT3-Personal and professional development</b></p> <ul style="list-style-type: none"> <li>To have openness to lifelong learning</li> <li>To realise the need for individual study as the basis of personal autonomy and professional development</li> <li>To optimally exploit his potential in creative and collective activities</li> <li>To have ability to use information and communication technology</li> </ul>
--------------------------------	---

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

7.1 The general objective of the discipline	<p><b>General objectives:</b></p> <ul style="list-style-type: none"> <li>Understanding and gaining the necessary knowledge about the types of imaging investigations used in rheumatology;</li> <li>Acquisition of key concepts related to diagnosis and systemic/ local treatment of major rheumatic disorders;</li> <li>Knowing the basics in musculoskeletal ultrasonography, capillaroscopy, computed tomography and magnetic resonance imaging;</li> </ul>
7.2 The specific objectives of the discipline	<p><b>Specific Objectives:</b></p> <ul style="list-style-type: none"> <li>Interpret aspects of musculoskeletal ultrasonography, magnetic resonance imaging (MRI) and capillaroscopy;</li> <li>Select type of imaging investigation to assess complex rheumatic diseases.</li> <li>Evaluate new imaging techniques, MRI, PET.</li> <li>Understand the indications and contraindications of complex therapeutic and diagnostic procedures such as joint, tendon injections or puncture, ultrasound guided biopsies etc.</li> <li>Undertake exercises with diagnosis and therapies, with interactive discussions about the possibilities of diagnosis and treatment in rheumatology.</li> <li>Submit reports with current data about particular cases encountered in practice.</li> </ul>

### 8. CONTENTS

8.1 Course (content units)	Hours
<b>Joints Ultrasonography</b> - Technical and therapeutic principles - Diagnostic role in acute inflammatory rheumatic diseases	1
<b>Joints Ultrasonography</b> - Diagnostic role in chronic inflammatory rheumatic diseases - Diagnostic role in degenerative rheumatic diseases	1
<b>Tendon and ligament Ultrasonography</b> - Technical and therapeutic principles - Ultrasound semiology in tendons and entheses -meaning and management	1
<b>Tendon and ligament Ultrasonography</b> - Ultrasound of ligaments -meaning and management	1
<b>Magnetic Resonance Imaging (MRI)</b> - Technical principles - Diagnostic applications of MRI in spondyloarthritis	1
<b>Magnetic Resonance Imaging (MRI)</b> - Diagnostic role of MRI in rheumatoid arthritis	1
<b>Capillaroscopy</b> - Technical principles - Indication of capillaroscopy - The role of capillaroscopy in diagnosis and evaluation of patients with systemic sclerosis	1
<b>Capillaroscopy</b> - The role of capillaroscopy in evaluation of other diseases, like systemic lupus erythematosus, dermatomyositis	1

<b>Conventional radiology</b> - Applications of conventional radiology - Conventional radiology in degenerative joint diseases	1
<b>Conventional radiology</b> - Conventional radiology in inflammatory joint diseases	1
<b>Computed tomography (CT)</b> - Technical principles - Applications of CT in rheumatology	1
<b>Ecografia interventionala</b> - Technical principles - Indications and applications of interventional ultrasonography	1
<b>Other imaging techniques in rheumatology</b> - Elastography and ARFI technique - Contrast agent ultrasound - 3D Joint and tendon ultrasonography, muscle, skin and nail ultrasonography– Applications in rheumatology	1
<b>Clinical cases presentation</b>	1
<b>BIBLIOGRAPHY</b> <b>Ecografie musculoscheletală – Semiologia normală și patologică a structurilor musculoscheletale</b> Sub redacția Daniela Fodor, Editura Librex 2017 <b>Ecografie musculoscheletală – Aplicații clinice ale ecografiei musculoscheletale</b> Sub redacția Daniela Fodor, Editura Librex 2018 <b>Tehnici de terapie locală în reumatologie</b> Sub redacția Florentin Vreju, Paulina Ciurea, Editura Medicală Universitară, 2014 <b>Atlas of capillaroscopy in rheumatic diseases</b> , 1st edition Sub redacția Maurizio Cutolo, Ed. Elsevier 2010 <b>MRI of the Musculoskeletal System</b> Sub redacția Martin Vahlensieck, Maximilian Reiser. Editura Thieme, 2017 <b>Spiral and Multislice Computed Tomography of the Body</b> Sub redacția Mathias Prokop, Michael Galanski, Editura Thieme, 2003.	
<b>8.2 Practical work (topics/themes)</b>	
-	

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

▪
---

## 10. METHODOLOGICAL LANDMARKS

Types of activity	Teaching Techniques / learning materials and resources: lecture, interactive group work, learning problems / projects etc. 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 provided in the discipline file.
Course	Lecture, heuristic conversation, debate
Practical work	Practical applications, problem solving, heuristic conversation, group work
Individual study	36 hours for individual study

## 11. RECOVERY PROGRAM

Absences recoveries	No. absences that can recover	Place of deployment	Period	In charge	Scheduling of topics
	2	Discipline's place/online	End of semester	Lecturer Dinescu Ștefan Cristian	
Schedule consultations / Students' Scientific Circle		Discipline's place/online	Every Monday, 14:00 during the semester	Lecturer Dinescu Ștefan Cristian	The themes developed in the course and practical internships and those proposed by the student, in accordance news

					rheumatology areas
Program for students poorly trained		Discipline's place/online	Every Monday, 14:00 during the semester	Lecturer Stefan Cristian Dinescu	The themes developed in the course and practical internships
<b>12. ASSESMENT</b>					
<b>Activity</b>	<b>Types of assesment</b>		<b>Methods of evaluation</b>		<b>Percentage from 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.		100%
<b>Practical work</b>	-		-		-
<b>Periodic checks</b>	-		-		-
<b>Attendance at the course</b>	-		-		-
<b>13. GUIDANCE AND COUNSELLING PROGRAMS</b>					
<b>Professional guidance and counselling programs (2 hours/monthly)</b>					
<b>Scheduling the hours</b>			<b>Place of deployment</b>		<b>In charge</b>
First Monday of the month 13:00			Discipline Place/online		Discipline Members

Endorsement date in the department: 28.09.2022

Department Director,  
Professor Cristin VERE

Coordinator of study program,  
Professor Marius Eugen CIUREA

Discipline holder,  
Lecturer Ștefan Cristian DINESCU