



PA 7.5.1 SYLLABUS

ED: 02

DATE: 20.12.2013

PAGE. 3/3

Approved

At the meeting of the Faculty Council
Medicine No. 2
Minutes No. 3 of 25.02.2014

Dean of the Faculty of Medicine No.2
PhD, associate professor Mircea BETIU

Approved

At the meeting of the chair Medical Clinic
No.5
Minutes No. 1 of 03.02.2014

Head of the chair Medical Clinic No.5,
PhD, associate professor Liliama GROPPA

SYLLABUS FOR STUDENTS OF THE FACULTY OF MEDICINE No. 2

Name of the course: **Rheumatology and Nephrology**

Code of the course: **42**

Type of course: **compulsory**

Total number of hours – 92,

lectures – 20 hours, practical lessons – 50 hours

Number of credits provided for the course: 4

Lecturers teaching the course: PhD, assoc., Ala PASCARI-NEGRESCU

PhD, assoc., Eugeniu RUSSU

PhD, assoc., Elena DESEATNICOVA

PhD, assoc., Petru CEPOIDA



PA 7.5.1 SYLLABUS

ED: 02

DATE: 20.12.2013

PAGE. 3/3

I. Aim of the discipline

Rheumatology / Nephrology is one of the basic disciplines in the university education regardless of what specialty physicians chooses later.

The main purpose of the Discipline is to acquire knowledge and training skills necessary to achieve diagnosis, treatment and social reintegration of patients with rheumatic diseases and nephrology.

II. Objectives obtained in teaching the discipline

▪ At the level of knowledge and understanding

1. To know the basis of Morphopatology, Pathophysiology, Pharmacology, Semiology;
2. To know and appropriately use the subject-specific notions of Rheumatology / Nephrology;
3. To know biological legalities in order to address the issue of human pathology and facilitate morphological aspects within the clinical correlation.

▪ At the level of application

1. in theory:

To acquire knowledge about clinical aspects and treatment of musculoskeletal diseases and nephrological diseases;

2. in practice:

- To clinically evaluate the patient with rheumatic disease and nephrology (Annex 1 Skills Practice)
- At the end of internship to know practical aspects of the musculoskeletal radiography and excretory interpretation, acute phase reactants research, research immune indices, tender joint count, swollen joint count, DAS 28 index, synovial fluid research, computerized tomography and MRI musculoskeletal and excretory, ultrasound examination of the musculoskeletal and excretory, skeletal scintigraphy and excretory apparatus, osteodensitometry;
- To be involved in nephrology emergencies: acute renal failure, etc.

▪ At the level of integration

1. To appreciate the importance of rheumatology and nephrology in the context of Medicine;
2. To tackle the creative problems of clinical medicine;
3. To deduct the interrelations between Rheumatology, Nephrology and other clinical disciplines;
4. To possess skills to implement and integrate clinical knowledge;
5. To be able to assess and self-assess objective knowledge in the field;
6. To be able to assimilate new developments in clinical disciplines.



PA 7.5.1 SYLLABUS

ED: 02

DATE: 20.12.2013

PAGE. 3/3

III. Provisional terms and conditions

Rheumatology/Nephrology is fertile ground for integration and implementation of fundamental knowledge (anatomy, human physiology, microbiology, physiology etc.). In clinical practice students study the etiology, pathogenesis, clinical manifestations, evolution, treatment and prevention of rheumatic diseases/Nephrology, future specialist's practical skills for investigating and assessing patient's results.

A special role lies in setting up rheumatology and nephrology clinical judgment that will ensure a correct diagnosis, appropriate treatment and resolving emergencies in rheumatic diseases/Nephrology.

IV. Main theme of the course

A. Lectures:

Nr.	Theme	Nr.of hours
1.	Introduction to the discipline of nephrology. Symptoms and syndromes in nephrology.	2 h
2.	Glomerular nephropathies.	2 h
3.	Tubulointerstitial renal disease (chronic pyelonephritis).	2 h
4.	Acute renal failure and chronic kidney disease.	2 h
5.	Introduction to the discipline of rheumatology.	2 h
6.	Acute rheumatic fever.	2 h
7.	Rheumatoid arthritis.	2 h
8.	LES.	2 h
9.	Seronegative spondyloarthropathies. Reactive arthritis.	2 h
10.	Osteoarthritis	2 h
	Total	20 h



PA 7.5.1 SYLLABUS

ED: 02

DATE: 20.12.2013

PAGE. 3/3

B. Practical lessons:

Nr.	Theme	Nr.h
1.	Introduction to the discipline of nephrology. Symptoms and syndromes in nephrology. Patient's curation. Internships course.	5 h 1 h
2.	Glomerular nephropathies. Internship course.	5 h 1 h
3.	Tubulointerstitial renal disease (chronic pyelonephritis). Internship course.	5 h 1 h
4.	Acute renal failure and chronic kidney disease. Internship course.	5 h 1 h
5.	Introduction to the discipline of rheumatology. Internship course.	5 h 1 h
6.	Acute rheumatic fever. Internship course.	5 h 1 h
7.	Rheumatoid arthritis. Internship course.	5 h 1 h
8.	LES. Internship course.	5 h 1 h
9.	Seronegative spondyloarthropathies. Reactive arthritis. Internship course.	5 h 1 h
10.	Osteoarthritis. Internship course.	5 h 1 h
11.	Duties.	12 h
	Total	72 h

V. Recommended literature:

- A. compulsory:

In Romanian:

1. Compendiu de reumatologie. Sub redac ia Liliana Groppa, Chi in u, 2009
2. Reumatologie. Sub redac ia C. Babiuc, Chi in u, 2010
3. Manual de nefrologie. Adrian Covic, Polirom, 2009
4. Compendiu de nefrologie. Sub redac ia C. Babiuc, Chi in u, 2013

In Russian:

1. . . . , 2009
2. - . . . , 2008
3. : , 2010
4. . . . , 2000
5. . . . « » , 2009

In English:

1. Rheumatology. Edited by: Marc C. Hochberg, Alan J. Silman, 2008
2. Kelley's Textbook of Rheumatology 8th edition, W.B. Saunders Company, 2008



PA 7.5.1 SYLLABUS

ED:	02
DATE:	20.12.2013
PAGE. 3/3	

3. ABC of Rheumatology, 4th edition, Edited by Adewale Adebajo, 2010
4. Rheumatology – Clinical Scenarios. Efim Benenson, 2011.
5. Oxford Textbook of Clinical nephrology 3th edition, 2 vol., 2005

In French:

1. Rhumatologie. Éditeur: Elsevier Masson. Date de publication: 28 septembre 2011

- *B. additional:*

In Romanian:

1. Esențialul în reumatologie. Ediția a 2-a revizuită. Ruxandra Ionescu, 2009
2. Artritele infecțioase, infecțioase-reactive și metabolice. Vasile Cepoi, 2003
3. Tratat de nefrologie. Alexandru Ciocalteu, 2006
4. Manual de nefrologie. Ursea N. Fundația Română a Rinichiului, 2001
5. Elemente de nefrologie. V. Botnaru. Chișinău, 2007
6. Medicină internă – brevial – Modulul Nefrologie. V. Botnaru, 2002

In Russian:

1. . . . , 2008
2. , . . . , 2008
3. . . . , 2009
4. . . . , 2000

In English:

1. Current diagnosis and treatment Rheumatology. John Imboden, David Hellmann, John Stone, 2008
2. Self Assessment Questions in Rheumatology. Yousaf Ali, HummanaPres, 2009
3. ABC of Rheumatology, 4th edition, Edited by Adewale Adebajo, 2010

VI. Teaching and learning methods

The discipline of Rheumatology / Nephrology is taught using traditional methods: with lectures and practical work. Lectures are read by tenured professors.

Department reserves the right to spend practical work and lectures in an interactive manner.

Algorithm of practical lesson in Rheumatology/Nephrology with the duration - 5 academic hours (225 min)

- a. The report of the evening duty presented by the student who performed the duty the day before - 5-7 min.
- b. Teacher's answers to the questions on the topic - 10 to 15 min.
- c. Assessment of basic knowledge (pretest) - 15 to 20 min.
- d. Independent work with patients - 30 - 35 min.
- e. Topic discussion using teaching and illustrative materials - 60 min.
- f. Illustration of the topic through the collection of illustrative materials (radiograms, ECG, EcoCG and especially the macro and morphological micropreparations). - 35 min.
- g. Subsequent continuation of the discussion on the topic at the bedside of a patient regarding



PA 7.5.1 SYLLABUS

ED: 02

DATE: 20.12.2013

PAGE. 3/3

concrete clinical cases based on situation-based problems with laboratory and instrumental results - 60 min

h. Estimation of practical assimilation of the topic, conclusions - 10 min.

VII. Suggestions for individual activity

From the pedagogical point of view, one of the least effective methods of learning is passive obedience class, even when structuring and illustrating them very thoroughly.

If you want to have success in acquiring knowledge in Rheumatology/Nephrology you have to work actively with theoretical material and patients.

What this means:

1. Read the original material, but don't simply follow the order on diagonal. Do take notes. Try to formulate your own highlights. Study the diagrams and pictures from the textbook and notebook. Reply to the tests from books. Meet the Breviary Module for Rheumatology / Nephrology.
2. Attend courses and practical work, but not for only attendance! If you do, you will hardly meet the requirements. Read the information carefully and ask yourself questions: Do you agree with the teacher? Do you understand what is all about? Does it correspond to the material taught in the manual?
3. Ask questions! Ask your teacher, each other and yourselves. Ask in the auditorium, in the corridors and teacher's office. That means that you are trying to understand and process the material taught in the class. You can stay after practical lessons for individual consultations.
4. Organize your colleagues into groups of 2-3 to meet with you regularly to discuss the material and prepare for practical lessons. Usually, in small working groups the understanding is much broader and clearer than working individually. In addition, the ability to explain the material learned to your colleagues will be very useful for the future.
5. Use the time reasonably. The discipline of Rheumatology/Nephrology - Clinical Synthesis implies high requirements. The subjects taught in this academic year has the same requirements. Therefore, you have to manage your time and find the reasonable "gold" balance of the effort to acquire knowledge, other responsibilities and personal life.

VIII. Methods of assessment

Assessment of students during the module:

a. Practical lessons – every lesson the student is rated according to the estimated pretest (most commonly in the form of a pop quiz), work at the bedside, communication reports on the respective theme as well as its practical assimilation.

b Medical observation card is signed when presenting it and there is a discussion at the end of the module.

For the promotional examination in the Discipline of Rheumatology/Nephrology students with an annual average grade under 5 and those who didn't recover the absences from practical work are not admitted.

The subject examination in Rheumatology/Nephrology (summary assessment) is a combination test consisting of multiple-choice test (option "Test Editor" State University of Medicine and Pharmacy "Nicolae Testemitanu"), oral test and assessment of the practical skills.



PA 7.5.1 SYLLABUS

ED: 02

DATE: 20.12.2013

PAGE. 3/3

The test consists of multiple-choice options of those 100 tests for each course with all topics of Rheumatology/Nephrology: 40 tests are simple compliment, 60 tests are multiple compliment tests. The student is provided a total of 2 hours to answer the test. Students have 30 minutes to prepare the responses. The test is evaluated with marks from 0 to 10. Topics for practical skills are approved and presented to students at the Department meeting at least one month before the session.

The final grade consists of 3 components: annual average mark (coefficient 0.3), practical skills (coefficient 0.2), multiple-choice test (coefficient 0.2) and the oral test (coefficient 0.3). Knowledge is assessed with a mark from 10 to 1 without decimals, as follows:

- Grade 10 or "excellent" (equivalent to ECTS - A) is given to those who acquire 91-100% of the material;
- Grade 9 or "very good" (equivalent ECTS - B) is given to those who acquire 81-90% of the material;
- Grade 8 or "good" (equivalent ECTS - C) is given to those who acquire 71-80% of the material;
- Grade 6 and 7 or "satisfactory" (equivalent ECTS - D) are given to those who acquire 61-65% and 66-70% of the material;
- Grade 5 or "poor" (equivalent ECTS - E) is given to those who acquire 51-60 of the material;
- Grade 3 and 4 (equivalent ECTS - FX) are given to those who acquire 31-40% and 41-50% of the material;
- Grade 1 and 2 or "unsatisfactory" (equivalent ECTS - F) are given to those who acquire 0-30% of the material.

Assessment scale

Knowledge is assessed with marks from 10 to 1 without decimals. Grades 5 to 10, obtained as a result of the evaluation of course unit, allow the obtaining of provided credits, according to the curriculum. Final grade results from the average of current assessment and final examination which is rounded up to integer in favour of student. Students who in final examination have a mark under "5" are not admitted to the final evaluation.

- **Grade 10** or 'excellent' is given for demonstration profound and remarkable theoretical and practical skills developed during course unit, creativity demonstrated in the application of acquired skills, considerable independent work and proficient knowledge of literature from the respective domain. It shows that student learned 91-100% of the material included in the curriculum/ syllabus of the course unit.
- **Grade 9** or "very good" is given for a very good demonstration of practical skills and theoretical knowledge developed during the course unit, with a few minor/nonessential errors. Student learned 81-90% of the material included in the syllabus of the course unit.
- **Grade 8** or "good" is given for demonstration of good theoretical knowledge and practical skills developed during the course unit/module, but with a certain lack of confidence and indetermination which regards the profoundness and details of the course, but which can be corrected by the student through answers to additional questions. Student learned 71-80% of the material included in the syllabus of the course unit.



PA 7.5.1 SYLLABUS

ED: 02

DATE: 20.12.2013

PAGE. 3/3

- **Grade 6 and 7** or "satisfactory" are given for demonstration of basic skills developed during the course unit and the ability to apply them in typical situations. Student's response lacks confidence and shows significant gaps in the knowledge of the course unit/ module. Student learned 61-65% and 66-70% of the material.
- **Note 5** or "weak" is given for demonstration minimum competencies of the course unit, the implementation of which faces many difficulties. Student learned 51-60% of the material.
- **Notes 3 and 4** are given when a student fails to demonstrate minimum competencies and requires additional work. Student mastered 31-40% and 41-50% of the material.
- **Notes 1 and 2** or "unsatisfactory" are awarded to students who copied or showed minimal knowledge of the course unit of 0-30%. In order to pass the examination, students have to work a lot.

Methods of mark rounding

The average of current and final marks	Final mark
5	5
5,1-5,5	5,5
5,6-6,0	6
6,1-6,5	6,5
6,6-7,0	7
7,1-7,5	7,5
7,6-8,0	8
8,1-8,5	8,5
8,6-9,0	9
9,1-9,5	9,5
9,6-10	10

Absence on examination without good reason is recorded as "absent" and is equivalent to 0 (zero). The student has the right to re-take the exam twice.

IX. Language of study

Romanian, Russian, English, French.