



**Integrated academic studies of medicine**

**Sixth year**

School year 2024/2025.

**Geriatrics**

The course is evaluated with 2 ECTS – European Credit Transfer System. There are 2 hours of active teaching per week (1 hour of lectures and 1 hour of work in a small group).

<b>Study program: Integrated academic studies of medicine</b>
<b>Subject name: Geriatrics</b>
<b>Course status: mandatory</b>
<b>ESPB number: 2</b>
<p><b>Objective of the course</b></p> <p>Students are taught how to recognize, treat and approach elderly patients, which brings with it numerous specificities. Through classical training in taking anamnesis, clinical examination of patients, students are trained in the timely recognition of acute and chronic infectious diseases from the perspective of a general practitioner, as well as chronic non-infectious diseases, which are characteristic of this population</p>
<p><b>The goal of the course</b></p> <p>While attending classes, students acquire the necessary knowledge in the field of pathogenesis, clinical picture and therapy of the most common diseases and conditions that occur in the geriatric population, emphasizing all the specificities of this age group in relation to the working population. Special attention is paid to the importance of preventive medical measures and procedures, as well as screening measures that must be implemented. Part of the teaching is dedicated to home care and treatment of the elderly who need long-term or palliative care.</p>
<p><b>Course content</b></p> <p><b>Theoretical teaching</b></p> <ol style="list-style-type: none"> <li>1. Biology of aging</li> <li>2. Metabolic and endocrine diseases of the elderly</li> <li>3. Diseases of the heart and blood vessels of the elderly</li> <li>4. Lung diseases of the elderly</li> <li>5. Oncology of the elderly</li> <li>6. Hematology of the elderly and nephrology of the elderly</li> <li>7. Gastroenterology of the elderly</li> <li>8. Neurological diseases of the elderly</li> <li>9. Psychiatric diseases of the elderly</li> <li>10. Infectious diseases of the elderly</li> <li>11. Intensive care of the elderly</li> <li>12. Urological diseases of the elderly</li> <li>13. Traumatologia in the elderly</li> <li>14. Gynecology of the elderly</li> <li>15. Rehabilitation and physical activity of the elderly</li> <li>16. Health care for the elderly</li> </ol> <p>Practical teaching</p> <p>Practical teaching consists of: meeting with the specifics of work of the geriatric service.</p>
<p><b>Literature</b></p> <p>Mandatory</p> <ol style="list-style-type: none"> <li>1. "Internal propedeutics" by Ratomir Antić and others. University of Belgrade, Faculty of Medicine.</li> <li>2. "Internal medicine 1" by Prof. Dr. Dragoljub Manojlović and collaborators. University of Belgrade, Faculty of Medicine</li> <li>3. "Internal medicine 2" by Prof. Dr. Dragoljub Manojlović and collaborators. University of Belgrade, Faculty of Medicine</li> </ol> <p>-Literature is available at library</p>

<b>Number of hours of active teaching:</b>	<b>Theoretical teaching: 15</b>	<b>Practical teaching: 15</b>	
<b>Teaching methods</b>			
Theoretical and practical teaching, demonstration lectures, tour of tertiary health care institution.			
<b>Knowledge assessment (maximum number of points 100)</b>			
<b>Pre-examination requirements</b>	points	<b>Final exam</b>	<b>points</b>
activity during the lecture	30	<b>written exam</b>	70

EVALUATION: The grade is equivalent to the number of points earned (see the table). Points are obtained in two ways:

CLASS ACTIVITY: In this way, students can earn up to 30 points for preparedness and attendance in exercises.

FINAL EXAM: The written part of the exam is in the form of a test consisting of 35 questions. Each question is graded from 0-2 points. In this way, a student can earn up to 70 points.

The final grade is formed as follows:

For a student to pass the course, they must earn a minimum of 51 points.

Points Earned	Grade
0-50	<b>5</b>
51-60	<b>6</b>
61 -70	<b>7</b>
71-80	<b>8</b>
81-90	<b>9</b>
91-100	<b>10</b>

CONSULTATIVE TEACHING: Consultations can be scheduled with the course coordinator, asst Prof. dr. Miodrag Sreckovic ([sreckovic7@gmail.com](mailto:sreckovic7@gmail.com)).

## TEACHERS AND ASSOCIATES:

SN	Name and surname	email	title
1.	Katarina Janićjević	kaja.andreja@yahoo.com	Associate professor
2.	Radojica Stolić	radsto@ptt.rs	Full professor
3.	Ivan Čekerevac	icekerevac63@sbb.rs	Full professor
4.	Katarina Vesić	stojanovick@yahoo.com	Assistant professor
5.	Milica Borovčanin	milicaborovcanin@yahoo.com	Associate professor
6.	Mirjana Veselinović	veselinovic.m@sbb.rs	Associate professor
7.	Marija Sekulić	msekulic82@gmail.com	Associate professor
8.	Aleksandar Gavrilović	agavrilovic@hotmail.com	Assistant professor
9.	Rada Vučić	rada.vucic@gmail.com	Assistant professor
10.	Tomislav Nikolić	marvin@sbb.rs	Associate professor
11.	Dalibor Stajić	stajicdalibor@yahoo.com	Assistant professor
12.	Dejan Aleksić	drdeal1987@gmail.com	Assistant professor

## **PROGRAM:**

### **TEACHING UNIT 1 (FIRST WEEK):**

INTRODUCTION TO GERIATRICS History of geriatrics .Social problems of geriatric . Home care for the elderly. Care and nutrition of the elderly. Analysis of energy needs in old age

### **TEACHING UNIT 2 (SECOND WEEK):**

AGING AND DISTURBANCES OF WATER AND SALT HOMEOSTASIS IN THE ELDERLY Aging and disturbances of water and salt homeostasis in the elderly. Care and nutrition of the elderly Fluid energy intake

### **TEACHING UNIT 3 (THIRD WEEK):**

CEREBROVASCULAR DISEASES IN THE ELDERLY Hemiplegia. Extrapyrarnidal disorders.Organic psychosyndrome. Care of patients with extrapyramidal syndrome lesions.Home care after a cerebrovascular incident (CVI)

### **TEACHING UNIT 4 (FOURTH WEEK):**

HEART DISEASES Myocarditis. Acute myocardial infarction. Heart failure. Chronic myocardial disease. Care of patients after acute myocardial infarction. Care of patients with chronic myocardial disease. Home care for cardiac patients. Principles of diagnostics in cardiology

### **TEACHING UNIT 5 (FIFTH WEEK):**

DISEASES OF PERIPHERAL BLOOD VESSELS Arterial system. Venous system. Lymphatic system.

### **TEACHING UNIT 6 (SIXTH WEEK):**

SERUM LIPIDS AND ATHEROSCLEROSIS The importance of nutrition in regulating lipid status.The importance of physical activity in regulating lipid status.

### **TEACHING UNIT 7 (SEVENTH WEEK):**

Lung diseases. COPD. Chronic restrictive lung diseases. Aerosol therapy.

### **TEACHING UNIT 8 (EIGHTH WEEK):**

DISEASES OF ENDOCRINE GLANDS Diabetes mellitus. Prevention of diabetes. The role of education for diabetics, diabetic schools. Nutrition of diabetics

### **TEACHING UNIT 9 (NINTH WEEK):**

THYROID GLAND DISEASES. Thyroid gland disease.

### **TEACHING UNIT 10 (TENTH WEEK):**

IMMUNE SYSTEM IN THE ELDERLY. Problems of infectious diseases in old age. Problems related to the immune system of elderly persons. Measures to improve the immune abilities of elderly persons

**TEACHING UNIT 11 (ELEVENTH WEEK):**

ANEMIAS IN THE ELDERLY AND MALIGNANT HEMATOLOGICAL DISORDERS lectures 1 hour  
exercises 1 hour Anemias in the elderly and malignant hematological disorders Role of the nurse in the  
care and treatment of hematological patients, daily hematological clinic, chemotherapy

**TEACHING UNIT 12 (TWELFTH WEEK):**

RHEUMATIC DISEASES IN ELDERLY PERSONS. Specifics of clinical picture Importance of natural  
therapy in the treatment of rheumatic diseases Education of rheumatic patients in old age.

**TEACHING UNIT 13 (THIRTEENTH WEEK):**

KIDNEY DISEASES. Pyelonephritis. Kidney tumors. Renal colic Bladder. Adenoma-Carcinoma of the  
prostate Specifics of care in renal patients. Dialysis, principles, indications, contraindications

**TEACHING UNIT 14 (FOURTEENTH WEEK):**

UROLOGICAL PROBLEMS IN OLD AGE. Prostate diseases. Pelvic organ prolapse Pelvic floor  
weakness. Cystic discomfort Incontinence. Kidney transplantation

**TEACHING UNIT 15 (FIFTEENTH WEEK):**

PSYCHOTIC DISORDERS IN THE ELDERLY. Organic psycho syndrome. Types of cognitive  
disorders in old age

# **LECTURES**

**TUESDAY**

**15:30-16:15**

(Hall at the Internal Clinic)

# **PRACTICE**

**TUESDAY**

**16:30-18:00**

(Internal Clinic)

## CLASS SCHEDULE GERIATRICS

week	Lesson name	teacher
1	<b>L</b> History of geriatrics. Social problems of geriatric patients	Associate professor Katarina Janičijević
1	<b>P</b> Home care for the elderly. Care and nutrition of the elderly. Analysis of energy needs in old age	Associate professor Marija Sekulić
2	<b>L</b> Aging and disturbances of water and salt homeostasis in the elderly	Full professor Radojica Stolić
2	<b>P</b> Care and nutrition of the elderly. Fluid energy intake	Assistant professor Dalibor Stajić
3	<b>L</b> Hemiplegia. Extrapyramidal disorders. Organic psychosyndrome.	Assistant professor Aleksandar Gavrilović
3	<b>P</b> Care of patients with extrapyramidal syndrome lesions. Home care after a cerebrovascular incident (CVI)	Assistant professor Aleksandar Gavrilović
4	<b>L</b> Myocarditis. Acute myocardial infarction. Heart failure. Chronic myocardial disease.	Assistant professor Miodrag Srećković
4	<b>P</b> Care of patients after acute myocardial infarction. Care of patients with chronic myocardial disease. Home care for cardiac patients	Assistant professor Miodrag Srećković Assistant professor Rada Vučić
5	<b>L</b> Arterial system. Venous system. Lymphatic system. Tasks and duties of the professional nurse in patients with peripheral vascular diseases. Prevention of peripheral blood circulation lesions. The importance of physical activity in the prevention of peripheral vascular diseases	Assistant professor Rada Vučić
5	<b>P</b> Tasks and duties of the professional nurse in patients with peripheral vascular diseases. Prevention of peripheral blood circulation lesions. The importance of physical activity in the prevention of peripheral vascular diseases	Assistant professor Miodrag Srećković Assistant professor Rada Vučić
6	<b>L</b> The importance of nutrition in regulating lipid status. The importance of physical activity in regulating lipid status. Tasks and duties of the professional nurse in patients with pronounced atherosclerosis	Assistant professor Miodrag Srećković
6	<b>P</b> Tasks and duties of the professional nurse in patients with pronounced atherosclerosis	Assistant professor Miodrag Srećković Assistant professor Rada Vučić
7	<b>L</b> COPD. Chronic restrictive lung diseases. Aerosol therapy. Preparation of patients for spirometry. Home care for respiratory patients	Full professor Ivan Čekerevac
7	<b>P</b> Preparation of patients for spirometry. Home care for respiratory patients.	Full professor Ivan Čekerevac

## CLASS SCHEDULE GERIATRICS

week	Lesson name	teacher
8	<b>L</b> Diabetes mellitus	Assistant professor Violeta Mladenović
8	<b>P</b> Prevention of diabetes. The role of education for diabetics, diabetic schools. Nutrition of diabetics	Assistant professor Violeta Mladenović
9	<b>L</b> Thyroid gland diseases	Assistant professor Violeta Mladenović
9	<b>P</b> Preparation of patients for examination in thyroid gland diseases. Care of patients with thyroid gland diseases	Assistant professor Violeta Mladenović
10	<b>L</b> Problems of infectious diseases in old age Problems related to the immune system of elderly persons. Measures to improve the immune abilities of elderly persons	Assistant professor Miodrag Srečković
10	<b>P</b> Problems related to the immune system of elderly persons. Measures to improve the immune abilities of elderly persons	Assistant professor Miodrag Srečković
11	<b>L</b> Anemias in the elderly and malignant hematological disorders	Assistant professor Miodrag Srečković
11	<b>P</b> Role of the nurse in the care and treatment of hematological patients, daily hematological clinic, chemotherapy	Assistant professor Miodrag Srečković
12	<b>L</b> Rheumatic diseases in elderly persons	Associate professor Mirjana Veselinović
12	<b>P</b> Importance of natural therapy in the treatment of rheumatic diseases. Education of rheumatic patients in old age. The role of spa therapy programs in old age. Recreation and rheumatic disease	Associate professor Mirjana Veselinović
13	<b>L</b> Kidney diseases. Pyelonephritis. Kidney tumors. Renal colic Bladder. Adenoma-Carcinoma of the prostate	Associate professor Tatjana Lazarević
13	<b>P</b> Specifics of care in renal patients. Dialysis, principles, indications, contraindications	Associate professor Tatjana Lazarević Assistant professor Tomislav Nikolić
14	<b>L</b> Urological problems in old age	Full professor Radojica Stolić
14	<b>P</b> Application of catheters in urological patients. Application of exercises in pelvic floor weakness. Care for incontinence	Full professor Radojica Stolić Assistant professor Tomislav Nikolić
15	<b>L</b> Psychotic disorders in the elderly	Full professor Milica Borovčanin
15	<b>P</b> Care for psychotic patients Social problems related to psychiatric patients in old age The role and diagnostics of psychiatric patients	Full professor Milica Borovčanin

## CLASS SCHEDULE GERIATRICS

week		Lesson name	teacher
	<b>T</b>	<b>Final test</b>	
	<b>E</b>	<b>Exam</b>	

