

INTEGRATED ACADEMIC STUDIES OF MEDICINE

CLINICAL PROPEDEUTICS

THIRD YEAR OF STUDIES

| Course: |
|----------------------------------------------------------------------------------------------------------------------------------------------------|
| CLINICAL PROPEDEUTICS |
| The course carries 8 ECTS. It has 135 classes of active teaching (3 classes of lectures per week and 6 classes of work in a small group per week) |
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TEACHERS AND ASSOCIATES:

| SN | Name and surname | E-mail address | title |
|-----|---------------------------|------------------------------|---------------------|
| 1. | Nataša Zdravković | natasasilvester@gmail.com | Full professor |
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| 12. | Violeta Mladenović | vikicam2004@gmail.com | Assistant professor |
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| 23. | Dragana Bubanja | drbubanja@gmail.com | Assistant |

COURSE STRUCTURE:

| Name of the module | Duration (weeks) | Lectures Per week | Work in a small group | Teacher |
|------------------------|---------------------|----------------------|--------------------------------|-----------------------------------------|
| Clinical propaedeutics | 15 | 3 | 6 | Violeta Mladenović, Assistant professor |
| | | | | $\Sigma 45 + 90 = 135$ |

EVALUATION:

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

ACTIVITY DURING THE LESSON:

In this way, the student can earn up to 15 points. During the last class of work in a small group, the student answers 2 exam questions from that week's lessons and, based on the demonstrated knowledge, gains 0-1 points. Attendance at lectures is mandatory.

MODULE TEST: In this way, the student can earn up to 15 points. The test has 30 questions. Each correct answer carries 0,5 point.

FINAL EXAM: In this way, a student can gain up to 70 points. The first part is practical exam (the final skills assessment: involves the student taking a medical history, conducting a physical examination of the patient), the student can gain up to 20 points. If the student does not pass the final skills assessment, she/he can not proceed to the oral part of the exam. The second part of the final exam is oral exam, entails the student orally answering five posed questions (each question is worth 0-10 points). In order to pass the final exam, the student must achieve a minimum of more than 50%+1 points. Final course grade based upon total point (see table).

| MODULE: Clinical propaedeutics | | | | | |
|-------------------------------------------|-----------------------------------------------------|----------------|-------|--|--|
| Knowleda | Knowledge assessment (maximum number of points 100) | | | | |
| Pre-exam activitiespointsFinal exampoints | | | | | |
| Lectures | | Written exam | | | |
| Practices | 15 | Practical exam | 20 | | |
| Test | 15 | Oral exam | 50 | | |
| | | | Σ 100 | | |

CONSULTATIVE TEACHING: Consultations can be scheduled by the teacher - head of the course: Violeta Mladenović, Assistant professor, (*vikicam2004@gmail.com*)

The final grade is formed as follows:

In order for a student to pass the course, she/he must obtain a minimum of 51 points.

In order to pass the course, the student must obtain a minimum of 51 points and pass all modules.

To pass the module the student must:

- 1. obtain more than 50% points in that module
- 2. acquire more than 50% of the points provided for the activity in teaching in each module
- 3. pass the module test, i.e. have more than 50% correct answers.

| number of points won | rating |
|----------------------|--------|
| 0 - 50 | 5 |
| 51 - 60 | 6 |
| 61 - 70 | 7 |
| 71 - 80 | 8 |
| 81 - 90 | 9 |
| 91 - 100 | 10 |

LITERATURE:

| MODULE | TITLE | AUTHORS | PUBLISHER | LIBRARY |
|------------------------|-----------------------------------------------------------------------------|------------------------------------------------------------------------|--------------------------------|---------|
| | Clinical Examination: A Systematic Guide to Physical Diagnosis, 7th Edition | Nicholas Joseph Talley, Simon O'Connor | Elsevier Health Sciences, 2014 | Yes |
| Clinical propaedeutics | Harrison's Principles of Internal Medicine, 20th Edition Textbook | Jameson JL, Fauci AS, Kasper DL, Hauser SL, Longo DL, Loscalzo J, eds. | McGraw Hill; 2018. | Yes |
| | Lecture handouts and notes | teachers | Faculty of Medical Sciences | Yes |

 ${\bf All\ lectures\ are\ on\ the\ website\ of\ the\ Faculty\ of\ Medical\ Sciences:\ www.medf.kg.ac.rs}$

COURSE CONTENT:

TEACHING UNIT 1 (FIRST WEEK):

PROPEDEAUTICS AS A MEDICAL DISCIPLINE

lectures 3 classes

Propedeautics as a medical discipline Principles of work of doctors and medical ethics The concept of health and disease Anamnesis - methodology of collecting symptoms of the disease

What the student needs to know:

The anamnesis and anamnesis parts
The concept of symptoms and signs of disease
The most important symptoms and signs of diseases
of certain systems and organs

Practical teaching 6 classes (follows theoretical teaching)

Introducing students to the components of the anamnesis

Introducing students to the concepts of symptoms and signs of illness

What the student needs to know:

To independently take a complete medical history from the patient

To know how to interpret the symptoms and signs of the disease present in patients

TEACHING UNIT 2 (SECOND WEEK):

ANAMNESIS AND OBJECTIVE PHYSICAL EXAMINATION

lectures 3 classes

Concept of health and disease

Objective physical examination and general inspection. Head and neck examination
Methodology for collecting disease signs

What a student should know:

Concept of anamnesis and parts of anamnesis Concept of symptoms and signs of disease The most important symptoms and signs of diseases of individual systems and organs Practical teaching 6 classes (follows theoretical teaching)

Taking an anamnesis from the patient, indicating the basic symptoms and signs of the disease

What a student should know:

To independently take a complete medical history from the patient

To know how to interpret the symptoms and signs of the disease present in the patient

Assessment of vital parameters (measurement of temperature and pulse, blood pressure, number of respirations).

General inspection.Head and neck examination.

TEACHING UNIT 3 (THIRD WEEK):

PROPEDEUTICS OF THE HEART AND BLOOD VESSELS 1

lectures 3 classes

Physical examination of the heart and great blood vessels

What a student should know:

Basics of examination of the heart and great blood vessels

Examination by the method of inspection, palpation, percussion and auscultation

Auscultation points

Heart sounds and murmurs. Noise classification

Practical teaching 6 classes (follows theoretical teaching)

Examination of the heart and blood vessels: history, inspection, palpation, auscultation of the heart (heart sounds and murmurs), palpation of the pulse, interpretation of the ECG.

Presentation of patients with heart diseases and familiarization with basic diagnostic procedures in cardiology

What a student should know:

The most important symptoms and signs of cardiac diseases

Basics of examination of the heart and great blood vessels

Examination by the method of inspection, palpation, percussion and auscultation by the student

Auscultation points

Heart sounds and murmurs. Noise classification

The most important symptoms and signs of cardiac diseases

Independent taking of anamnestic data in patients with various cardiac diseases

TEACHING UNIT 4 (FOURTH WEEK):

PROPEDEUTICS OF THE HEART AND BLOOD VESSELS 2

lectures 3 classes

Physical examination of the heart and great blood vessels

What a student should know:

Basics of examination of the heart and great blood vessels

Examination by the method of inspection, palpation, percussion and auscultation

Auscultation points

Heart sounds and murmurs.

Noise classification

The most important symptoms and signs of cardiac diseases

Practical teaching 6 classes (follows theoretical teaching)

Examination of the heart and blood vessels: history, inspection, palpation, auscultation of the heart (heart sounds and murmurs), palpation of the pulse, interpretation of the ECG.

Presentation of patients with heart diseases and getting to know with basic diagnostic procedures in cardiology

What a student should know:

Basics of examination of the heart and great blood vessels

Examination by the method of inspection, palpation, percussion and auscultation by the student

Auscultation points. Heart sounds and murmurs. Noise classification

The most important symptoms and signs of cardiac diseases

Independent taking of anamnestic data in patients with various cardiac diseases

TEACHING UNIT 5 (FIFTH WEEK):

PROPEDEUTICS OF THE RESPIRATORY ORGANS 1

lectures 3 classes

Physical examination of the chest and respiratory organs

What a student should know:

Objective examination of the chest wall Objective examination of the respiratory organs Propedeutics of the respiratory system: symptoms and signs of the disease and Practical teaching 6 classes (follows theoretical teaching)
Examination of the chest and lungs: history, topography of the chest, inspection, palpation, percussion and auscultation.

Presentation of patients with diseases of the respiratory tract and acquaintance with basic diagnostic procedures in pulmonology Acquaintance of students with an objective examination of the chest wall, respiratory organs

Acquaintance of students with the most important symptoms and signs of disease in patients with diseases of the respiratory organs

What a student should know:

History taking, objective examination of the chest and respiratory organs in a pulmonology patient by students

TEACHING UNIT 6 (SIXTH WEEK):

PROPEDEUTICS OF THE RESPIRATORY ORGANS 2

lectures 3 classes

Physical examination of the chest and respiratory organs

What a student should know:

Objective examination of the chest wall Objective examination of the respiratory organs Propedeutics of the respiratory system: symptoms and signs of the disease and Practical teaching 6 classes (follows theoretical teaching)
Examination of the chest and lungs: history, topography of the chest, inspection, palpation, percussion and auscultation.

Presentation of patients with diseases of the respiratory tract and acquaintance with basic diagnostic procedures in pulmonology Acquaintance of students with an objective examination of the chest wall, respiratory organs Acquaintance of students with the most important symptoms and signs of disease in patients with diseases of the respiratory organs

What a student should know:

History taking, objective examination of the chest and respiratory organs in a pulmonology patient by students

TEACHING UNIT 7 (SEVENTH WEEK):

PROPEDEUTICS OF THE HEMATOPOIESIS SYSTEM 1

lectures 3 classes

Physical examination of the hematopoietic system

Symptoms and signs of disease in patients with diseases of the hematopoietic system

Peculiarities of the anamnesis in patients with diseases of the hematopoietic system

What a student should know:

The most important symptoms and signs of diseases of the hematopoietic system

Symptoms and signs in patients with diseases of the hematopoietic system

Examination by the method of inspection, palpation, percussion and auscultation

Practical teaching 6 classes (follows theoretical teaching)
Examination of the spleen and lymph glands.
Presentation of patients with diseases of the hematopoietic system, and acquaintance with diagnostic procedures in hematology.
Acquaintance of students with the symptoms and signs of diseases in patients with diseases of the hematopoietic system

Objective examination of patients with diseases of hematopoietic system

What a student should know:

The most important symptoms and signs of diseases of the hematopoietic system
Independent taking of anamnestic data in patients with various diseases of hematopoietic system

TEACHING UNIT 8 (EIGHTH WEEK):

PROPEDEUTICS OF THE HEMATOPOIESIS SYSTEM 2

lectures 3 classes

Physical examination of the hematopoietic system

Symptoms and signs of disease in patients with diseases of the hematopoietic system

Peculiarities of the anamnesis in patients with diseases of the hematopoietic system

What a student should know:

The most important symptoms and signs of diseases of the hematopoietic system

Symptoms and signs in patients with diseases of the hematopoietic system

Examination by the method of inspection, palpation, percussion and auscultation

Practical teaching 6 classes (follows theoretical teaching)

Examination of the spleen and lymph glands.

Presentation of patients with diseases of the hematopoietic system, and acquaintance with diagnostic procedures in hematology. Acquaintance of students with the symptoms and signs of diseases in patients with diseases of the hematopoietic system

Objective examination of patients with diseases of hematopoietic system

What a student should know:

The most important symptoms and signs of diseases of the hematopoietic system

Independent taking of anamnestic data in patients with various diseases of hematopoietic system

TEACHING UNIT 9 (NINTH WEEK):

PROPEDEUTICS OF THE DIGESTIVE ORGANS 1

lectures 3 classes

Physical examination of the abdomen and abdominal organs

Getting to know the topographical position of the abdominal organs

Symptoms and signs in diseases of the esophagus, stomach, small intestine and large intestine

Importance of physical methods of examining the abdomen: inspection, palpation, percussion, auscultation of the abdomen

What a student should know:

What are the specific symptoms in diseases of the gastrointestinal tract

Knowledge of the basic physical methods of examining the abdomen

Application of additional diagnostic methods in diseases of the gastrointestinal tract

Practical teaching 6 classes (follows theoretical teaching)

Acquaintance of students with an objective examination of the abdomen, symptoms and signs of disease in patients with diseases of the digestive organs.

Examination of the abdomen and abdominal organs: history taking, inspection, superficial and deep palpation, percussion, examination of the liver, examination of free fluid in the abdomen, digitorectal examination.

Presentation of patients with diseases of the digestive system and acquaintance with diagnostic procedures in gastroenterology

What a student should know:

Independent taking of anamnestic data in patients with various diseases of the digestive organs
The most important symptoms and signs in diseases of the digestive organs
Examination by the method of inspection, palpation, percussion and auscultation

TEACHING UNIT 10 (TENTH WEEK):

PROPEDEUTICS OF THE DIGESTIVE ORGANS 2

lectures 3 classes

Physical examination of the abdomen and abdominal organs

Getting to know the topographical position of the abdominal organs Practical teaching for 6 classes (follows theoretical teaching)
Acquaintance of students with an objective examination of the abdomen, symptoms and signs of disease in patients with diseases of the digestive organs.

Symptoms and signs in diseases of the esophagus, stomach, small intestine and large intestine

Importance of physical methods of examining the abdomen: inspection, palpation, percussion, auscultation of the abdomen

What a student should know:

What are the specific symptoms in diseases of the gastrointestinal tract

Knowledge of the basic physical methods of examining the abdomen

Application of additional diagnostic methods in diseases of the gastrointestinal tract

Examination of the abdomen and abdominal organs: history taking, inspection, superficial and deep palpation, percussion, examination of the liver, examination of free fluid in the abdomen, digitorectal examination.

Presentation of patients with diseases of the digestive system and acquaintance with diagnostic procedures in gastroenterology

What a student should know:

Independent taking of anamnestic data in patients with various diseases of the digestive organs
The most important symptoms and signs in diseases of the digestive organs
Examination by the method of inspection, palpation, percussion and auscultation

TEACHING UNIT 11 (THE ELEVENTH WEEK):

PROPEDEUTICS OF THE KIDNEYS AND URINARY TRACTS 1

lectures 3 classes

Physical examination of the kidney and urinary tract

Peculiarities of the anamnesis in patients with kidney and urinary tract disease

Objective signs and symptoms that indicate kidney and urinary tract disease

What a student should know:

Knowledge of basic physical methods of kidney and urinary tract examination

Application of additional diagnostic methods in kidney and urinary tract diseases

Practical teaching 6 classes (follows theoretical teaching)
Acquaintance of students with an objective examination and symptoms and signs of disease in patients with kidney and urinary tract disease

Examination of the kidneys and urinary system: history, inspection, palpation, succussion.

Presentation of patients with urinary tract disease and familiarization with diagnostic procedures in nephrology

History taking, objective examination of patients with kidney disease by students

What a student should know:

The most important symptoms and signs in kidney and urinary tract diseases
Independent taking of anamnestic data in patients with various kidney and urinary tract diseases

Examination by the method of inspection, palpation, percussion and auscultation

TEACHING UNIT 12 (THE TWELFTH WEEK):

PROPEDEUTICS OF THE KIDNEYS AND URINARY TRACTS 2

lectures 3 classes

Physical examination of the kidney and urinary tract

Peculiarities of the anamnesis in patients with kidney and urinary tract disease

Objective signs and symptoms that indicate kidney and urinary tract disease

Practical teaching 6 classes (follows theoretical teaching)
Acquaintance of students with an objective examination and symptoms and signs of disease in patients with kidney and urinary tract disease

What a student should know:

Knowledge of basic physical methods of kidney and urinary tract examination

Application of additional diagnostic methods in kidney and urinary tract diseases

Examination of the kidneys and urinary system: history, inspection, palpation, succussion.

Presentation of patients with urinary tract disease and acquaintance with diagnostic procedures in nephrology

History taking, objective examination of patients with kidney disease by students

What a student should know:

The most important symptoms and signs in kidney and urinary tract diseases Independent taking of anamnestic data in patients with various kidney and urinary tract diseases

Examination by the method of inspection, palpation, percussion and auscultation

TEACHING UNIT 13 (THIRTEENTH WEEK):

PROPEDEUTIC OF THE GLANDS WITH INTERNAL SECRETION 1

lectures 3 classes

Physical examination of the endocrine glands

Peculiarities of the anamnesis in patients with diseases of glands with internal secretion Physical examination of patients with diseases of the endocrine glands

What a student should know:

Symptoms and signs of hyper and hypofunction of endocrine glands

Examination by the method of inspection, palpation, percussion and auscultation

Practical teaching for 6 classes (follows theoretical teaching)

Acquaintance of students with the symptoms and signs of diseases of endocrine glands

Acquaintance of students with an objective examination of the patients with diseases of endocrine glands

Presentation of patient with diseases of glands with internal secretion, and introduction to diagnostic procedures in endocrinology.

Objective examination of patients with diseases of glands with internal secretion

What a student should know:

Independent taking of anamnestic data in patients with various diseases of the endocrine glands. The most important symptoms and signs of hyper and hypofunction of endocrine glands. Examination of endocrine glands: history and physical examination.

TEACHING UNIT 14 (FOURTEENTH WEEK):

PROPEDEUTIC OF THE GLANDS WITH INTERNAL SECRETION 2

lectures 3 classes

Physical examination of the endocrine glands

Peculiarities of the anamnesis in patients with diseases of glands with internal secretion Physical examination of patients with diseases of the endocrine glands

What a student should know:

Practical teaching for 6 classes (follows theoretical teaching)

Acquaintance of students with the symptoms and signs of diseases of endocrine glands

Acquaintance of students with an objective examination of the patients with diseases of endocrine glands

Symptoms and signs of hyper and hypofunction of endocrine glands

Examination by the method of inspection, palpation, percussion and auscultation

Presentation of patient with diseases of glands with internal secretion, and introduction to diagnostic procedures in endocrinology.

Objective examination of patients with diseases of glands with internal secretion

What a student should know:

Independent taking of anamnestic data in patients with various diseases of the endocrine glands
The most important symptoms and signs of hyper and hypofunction of endocrine glands
Examination of endocrine glands: history and physical examination.

TEACHING UNIT 15 (FIFTEENTH WEEK):

PROPEDEUTICS OF THE LOCOMOTOR SYSTEM

lectures 3 classes

Physical examination of the locomotor apparatus

Characteristics of anamnesis in diseases of the locomotor system

Objective inspection of the locomotor system What the student needs to know:

The most important symptoms and signs of locomotor system disease

Inspection by inspection, palpation, percussion and ascultation method

Practical teaching 6 classes (follows theoretical teaching)

Examination of the extremities: history taking and physical examination.

Introducing students to an objective examination of the locomotor system

Introducing students to the symptoms and signs in patients with locomotor system disease

What the student needs to know:

The most important symptoms and signs of locomotor system disease Examination by the method of inspection, palpation, percussion and ascultation method Independent use of anamnestic data in patients with various diseases of the locomotor system

WEEKLY COURSE SCHEDULE

FRIDAY

HALL AT THE INTERNAL CLINIC

09:00 - 11:15

PRACTICE

FRIDAY

(INTERNAL CLINIC)

12:00 - 16:30

CLASS SCHEDULE FOR CLINICAL PROPEDEUTICS

| week | type | lecture title | teacher/assistant |
|------|------|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | L | Propedeautics as a medical discipline | Assistant professor Violeta Mladenović |
| | P | | Teaching asssistants:*** Assistant Professor Danijela Jovanović Assistant Professor Miodrag Srecković Assistant Professor Rada Vučić Assistant Professor Tomislav Nikolic Assistant Professor Željko Todorović Assistant Professor Vladimir Ignjatović Assistant Jelena Živić Assistant Anita Sarić Assistant Dragana Bubanja Assistant Stefan Simović |
| 2. | L | Anamnesis and objective physical examination | Assistant professor Violeta Mladenović |
| | P | | Teaching asssistants: *** |
| 3. | L | Propedeutics of the heart and blood vessels 1 | Assistant Professor Miodrag Srecković |
| | P | | Teaching asssistants: *** |
| 4. | L | Propedeutics of the heart and blood vessels 2 | Assistant Professor Rada Vučić |
| | P | | Teaching asssistants: *** |
| 5. | L | Propedeutics of the respiratory system 1 | Associate professor Vojislav Ćupurdija |
| | P | | Teaching asssistants: *** |
| 6. | L | Propedeutics of the respiratory system 2 | Associate professor Vojislav Ćupurdija |

CLASS SCHEDULE FOR CLINICAL PROPEDEUTICS

| week | type | lecture title | teacher/assistant |
|------|------|--------------------------------------------------|----------------------------------------|
| | P | | Teaching asssistants: *** |
| 7. | L | Hematopoietic system propaedeutics 1 | Full professor Svetlana Djukic |
| | P | | Teaching asssistants: *** |
| 8. | L | Hematopoietic system propaedeutics 2 | Assistant professor Danijela Jovanović |
| | P | | Teaching asssistants: *** |
| 9. | L | Propedeutics of digestive organs 1 | Full professor Nataša Zdravković |
| | P | | Teaching asssistants: *** |
| 10. | L | Propedeutics of digestive organs 2 | Full professor Nataša Zdravković |
| | P | | Teaching asssistants: *** |
| 11. | L | Propedeutics of kidneys and urinary tract 1 | Associate professor Tatjana Lazarević |
| | P | | Teaching asssistants: *** |
| 12. | L | Propedeutics of kidneys and urinary tract 2 | Assistant Professor Tomislav Nikolic |
| | P | | Teaching asssistants: *** |
| 13. | L | Propedeutics of glands with internal secretion 1 | Assistant professor Violeta Mladenović |
| | P | | Teaching asssistants: *** |
| 14. | L | Propedeutics of glands with internal secretion 2 | Assistant professor Violeta Mladenović |
| | P | | Teaching asssistants: *** |

| CLASS SCHEDULE FOR CLINICAL PROPEDEUTICS | | | | |
|------------------------------------------|-------------------------|--------------------------------------------|------------------------------------------------------------------------------|--|
| week | type | lecture title | teacher/assistant | |
| 15. | L | Propedeutics of of the locomotor apparatus | Full professor Aleksandra Lucic Tomic/ Full professor Mirjana Veselinović | |
| | P | | Teaching asssistants: *** | |
| | L-lecture P-practice | | | |
| | | MODULE TEST | | |
| | | FINAL (PRACTICAL+ORAL) EXAM | | |

EXAMINATION COMMITTEE FOR FINAL SKILLS ASSESSMENT AND ORAL EXAM
ACTIVITY DURING THE LESSON QUESTIONS
ORAL EXAM QUESTIONS