



PATHOLOGICAL BASIS OF THE DISEASE

THIRD YEAR OF STUDY

School year 2025/2026 .

INTRODUCTION TO CLINICAL PRACTICE

Subject:

INTRODUCTION TO CLINICAL PRACTICE

The subject is evaluated with 3 ECTS credits. There are 3 hours of active teaching per week (2 hours of lectures and 1 hour of work in a small group).

TEACHERS AND ASSOCIATES:

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COURSE STRUCTURE:

Module	Module name	Weeks	Lectures per week	Weekly small group work	Subject cheef
1	Introduction to clinical practice	15	2	1	Ass. Prof. Zeljko Todorovic
$\Sigma 30 + 15 = 45$					

ASSESSMENT:

Final mark is based on number of points acquired through preliminary exams activities and final exam

PRE-EXAM ACTIVITIES: In the last class of work in a small group, the student answers 2 exam questions and can gains 0-2 points. Student must obtain more than 50% of points on pre-exam activity.

FINAL EXAM: On final exam student can acquire up to 70 points. Student passes 35 questions test; each question is valued at 2 points. If student do not acquire more than 50% correct answers it will not pass final exam.

The final grade is formed as follows:

To pass the subject, student must acquire minimum 51 points, to pass pre-exam activities and to pass final exam.

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

LITERATURE:

textbook title	authors	publisher	library
Internal propaedeutics	Ratomir Antic and associates	University of Belgrade, Faculty of Medicine	have
Introduction to clinical practice: a textbook for basic teaching	Veljkovic M, Veljkovic V.	FMN, University of Kragujevac	have
All lectures are available on the Faculty of Medical Sciences website: www.medf.kg.ac.rs			

PROGRAM

UNIT 1 (FIRST WEEK):

ADMISSION OF PATIENTS FOR HOSPITAL TREATMENT

lectures 1 hour

- Introducing students to the procedure for admitting patients to the department and administratively opening a medical history.

What a student needs to know:

- The attitude of healthcare workers and medical students towards the patient
- Procedure for admitting patients to the ward
- Administrative formation of medical history
- Temperature list
- History and objective finding

1 hour of exercises

- Training students in the procedure for admitting a patient to the ward and taking a medical history

What a student needs to know:

- Procedure for admitting a patient to the ward
- Registering disorders present upon admission (whether the patient is mobile or not, whether he controls his sphincters or not, whether he has a urinary catheter in place, whether he complains of pain)
- Administrative formation of medical history
- Registering medications that the patient regularly used at home or in another hospital

UNIT 2 (SECOND WEEK):

GENERAL PATIENT EXAMINATION

lectures 1 hour

- Introducing students to the assessment of the patient's condition upon admission

What a student needs to know:

- Patient observation
- Recognizing symptoms and signs of disease
- Signs of illness (patient's position, mental state and state of consciousness, observation of the patient's appearance - constitution, height, nutrition, gait, speech, observation of the head, neck, chest, abdomen)
- State of consciousness (normal, impaired)
Types of disorders of consciousness (qualitative and quantitative)
- Assessment of patient mobility
- Measurement of body weight and height of patients. Body mass index. Measurement of trunk and limb circumference of patients
- Criteria for central and peripheral obesity
- Skin appearance assessment (registration)
noticeable changes in the color and appearance of the skin or any changes to the skin)

1 hour of exercises

- Introducing students to the assessment of the patient's condition upon admission

What a student needs to know:

- Introduction to the concept of disease
- Introduction to the term observation
- Getting to know the symptoms and signs of the disease
- Introduction to basic general patient examination
- Basic assessment of the patient's condition upon admission to the ward and during the patient's stay in the ward: state of consciousness (normal/impaired), measurement of the patient's body weight and height, measurement of the patient's trunk and limb circumference

UNIT 3 (THIRD WEEK):

VITAL FUNCTIONS

lectures 1 hour

1 hour of exercises

- Introducing students to the assessment of patient vital signs

What a student needs to know:

- Getting to know and assessment vital signs
Body temperature, pulse, breathing, blood pressure
- Body temperature regulation. Body temperature measurement. Temperature curves
- Palpation of the pulse on accessible arteries. Characteristics of the pulse. Characteristics of the pulse in certain diseases
- Breathing characteristics. Measurement of breathing frequency and quality. Disorders breathing. Pathological forms of breathing
- Blood pressure measurement. Standardization blood pressure measurements

- Training students to assess patient vital signs

What a student needs to know:

- Determining vital signs: measuring oral and axillary temperature, measuring pulse, measuring arterial blood pressure, measuring the frequency and quality of breathing

UNIT 4 (FOURTH WEEK):

BASIC PRINCIPLES OF DISEASE DIAGNOSIS

lectures 1 hour

- Introducing students to modern imaging diagnostics. X-ray diagnostics. Ultrasound diagnostics.

What a student needs to know:

- Introduction to the basics of X-ray and ultrasound diagnostics

1 hour of exercises

- Introducing students to modern imaging diagnostics. X-ray diagnostics. Ultrasound diagnostics.

What a student needs to know:

- Get to know X-ray and ultrasound diagnostic equipment
- Become familiar with protective measures in radiological and ultrasound diagnostic techniques
- Become familiar with the basic indications for X-ray and ultrasound diagnostics

UNIT 5 (FIFTH WEEK):

ENDOSCOPIC EXAMINATIONS AND PATIENT PREPARATION FOR EXAMINATIONS

lectures 1 hour

- Introducing students to the basics of endoscopic examination and patient preparation for radiological and endoscopic examinations

What a student needs to know:

- Introduction to the basics of endoscopic examination
- Introduction to patient preparation for radiological examinations
- Introduction to patient preparation for contrast radiological examinations
- Introduction to patient preparation for endoscopic examinations

1 hour of exercises

- Introducing students to the basics of endoscopic examination and patient preparation for radiological and endoscopic examinations

What a student needs to know:

- Get to know endoscopic diagnostic devices
- Become familiar with the basic indications for endoscopic diagnostics
- Familiarize yourself with patient preparation for endoscopic and radiological examinations

UNIT 6 (SIXTH WEEK):

ANALYSIS OF PATIENT'S EXCRETIONS

lectures 1 hour

- Introducing students to the procedure of drawing blood and other bodily fluids and sending them for laboratory examination

What a student needs to know:

- Introduction to the concept of cough, types of cough, sputum, urine, defecation and fecal masses
- Getting to know the types of enemas and their application
- Taking bodily fluids for examination
- Urine sampling for laboratory examination. Urine sampling for urine culture. 24- hour urine collection
- Taking a stool sample for laboratory testing examination. Taking a stool sample for coproculture
- Observing and recording the appearance of the patient's bodily secretions (urine, stool, sputum)
- Reading and interpreting the patient's temperature chart and the patient's care chart regarding body fluids

1 hour of exercises

- Introducing students to the basics of taking body fluids for examination

What a student needs to know:

- Introduction to the concept of cough, types of cough, sputum, urine, defecation and fecal masses
- Getting to know the types of enemas and their application
- Taking bodily fluids for examination
- Urine sampling for laboratory examination. Urine sampling for urine culture. 24- hour urine collection
- Taking a stool sample for laboratory testing examination. Taking a stool sample for coproculture
- Observing and recording the appearance of the patient's bodily secretions (urine, stool, sputum)
- Urinary catheter placement

UNIT 7 (SEVENTH WEEK):

LABORATORY DIAGNOSTICS (biochemical and microbiological analyses)

lectures 1 hour

- Introducing students to laboratory analyses, types of analyses, normal values of the most important parameters, indications for performing analyses

What a student needs to know:

- Getting to know each other with in taking samples blood for laboratory examination
- Introduction to taking blood samples for blood culture
- Getting to know each other with in the winter of the stomach content for laboratory analyses, taking sputum for examination, taking tissue scrap
- The importance of stool examination
- Taking swabs for laboratory examination . Culture and results of swabs
- Preparation of materials and documentation for laboratory examination
- Sending material for laboratory examination

1 hour of exercises

- Introduction to laboratory blood and urine analyses (biochemical and microbiological).

What a student needs to know:

- Become familiar with basic laboratory analyses
- Taking body fluids for examination: blood sampling, urine sampling, stool sampling, swab sampling, preparation of materials and documentation, sending materials for laboratory examination
- Learn the reference values of basic laboratory findings.
- Learn the clinical interpretation of pathological laboratory findings.

UNIT 8 (EIGHTH WEEK):

LABORATORY DIAGNOSTICS (hematological analyses)

lectures 1 hour

- Introducing students to hematological laboratory analyses

1 hour of exercises

- Introduction to hematological laboratory analyses

What a student needs to know:

What a student needs to know:

- Taking blood samples for laboratory examination
- Peripheral blood smear staining technique
- Bone marrow aspirate smear staining technique
- The importance of flow cytometry
- The importance of basic hemostasis tests

- Proper blood sampling from a peripheral vein
- How to make a peripheral blood smear
- Interpretation of blood count results and basic hemostasis tests

UNIT 9 (NINTH WEEK):

PATIENT NUTRITION

lectures 1 hour

- Introducing students to the basics of patient nutrition

What a student needs to know:

- Introduction to the concept of normal nutrition
- Getting to know the basic types of diets
- Introduction to artificial nutrition of patients
- Feeding patients orally
- Recording fluid intake
- Feeding patients via nasogastric tube
- Feeding patients through a gastrostomy tube

1 hour of exercises

- Introducing students to the basics of patient nutrition

What a student needs to know:

- Basic types of diets
- Help with food distribution
- Feeding the patient orally
- Recording fluid intake
- Method of administration of enteral and parenteral nutrition

UNIT 10 (TENTH WEEK):

DESINFECTION AND STERILIZATION

lectures 1 hour

- Introducing students to the basics disinfection and sterilization

What a student needs to know:

- Introduction to disinfection techniques and methods
- Introduction to sterilization techniques
- Introduction to the types and uses of antiseptic agents
- Introduction to personal protection of medical personnel
- Introduction to hand disinfection for doctors and nurses
- Introduction to disinfection of hospital rooms
- Introduction to disinfection of patient excreta
- Preparation of tweezers, forceps and other outpatient instruments for sterilization

1 hour of exercises

- Introducing students to the basics disinfection and sterilization

What a student needs to know:

- Learn disinfection techniques and methods
- Learn sterilization techniques
- Learn the use and application of antiseptics

UNIT 11 (WEEK ELEVEN):

APPLICATION OF DRUGS

lectures 1 hour

- Introducing students to the application of therapy to patients

What a student needs to know:

1 hour of exercises

- Introducing students to the procedure for administering prescribed therapy

What a student needs to know:

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| <ul style="list-style-type: none"> • Method of drug administration: oral, sublingual, rectal • Introduction to oral medication (tablets, capsules, lozenges) • Introduction to parenteral administration of drugs • Introduction to drug administration by intradermal, subcutaneous, intramuscular and intravenous injection • Introduction to administering medications through the respiratory system. Oxygen therapy. • Application of prescribed therapy. • Introduction to the preparation of drugs for oral and parenteral administration • Preparation of infusion solutions. Control of the rate of infusion solutions (calculation of the amount of drug administered with infusion solutions) • Assistance with drug distribution. • Medical-therapeutic actions (types, requirement, storage and administration of medications) | <ul style="list-style-type: none"> • Giving prescribed therapy • Interpretation of the therapeutic list • Drug preparation: for oral administration, for parenteral administration • Preparation of infusion solutions • Assistance with drug distribution • Drug administration by mouth, drug administration by parenteral route, drug administration by intradermal, subcutaneous, intramuscular and intravenous injection |
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UNIT 12 (WEEK TWELFTH):

INTENSIVE AND SEMI-INTENSIVE CARE

lectures 1 hour	1 hour of exercises
• Introducing students to the work of intensive and semi-intensive care	• Introducing students to the work of intensive and semi-intensive care
What a student needs to know: • Criteria for admission of patients to intensive and semi-intensive care • Specifics of care and treatment of patients in intensive and semi-intensive units	What a student needs to know: • Identifying a patient requiring treatment in intensive and semi-intensive care • Care of patients in intensive and semi-intensive units • Nasogastric tube placement • The importance of a central venous catheter

UNIT 13 (THIRTEENTH WEEK):

HEALTH CARE AND PATIENT TRANSPORT

lectures 1 hour	1 hour of exercises
• Introducing students to the basics of patient health care (patient care, nursing and hygiene in bed) • Introducing students to patient monitoring and transportation	• Introducing students to the basics of patient health care (patient care, nursing and hygiene in bed) • Introducing students to patient monitoring and transportation
What a student needs to know: • Morning care and patient care. Local hygiene of the patient (oral cavity, axillary and inguinal areas, pubic area) • Hygiene of the patient in bed. Washing the immobile patient. Bathing and washing the hair of the immobile patient • Prevention of decubitus ulcers in the immobile patient • Changing the patient's clothes	What a student needs to know: • Morning patient care and management: checking the patient's general condition, local hygiene of the patient, changing the patient's clothes, placing the goose and shovel, giving the patient an enema, replacing the urinary bag, observing and recording the appearance of the patient's bodily secretions • Patient transportation for consultative examinations and X-rays • Transferring an immobile or partially mobile patient

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| <ul style="list-style-type: none"> • Placement of the goose and shovel. Sphincter control. Enema of the patient • Replacing the urinary bag • Monitoring and transport of patients. Transport of patients for consultative examinations and X-rays. • Transferring an immobile or partially mobile patient | <ul style="list-style-type: none"> • Recording vital signs during patient transport |
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UNIT 14 (WEEK FOURTEEN):

DEATH CONFIRMATION PROCEDURE

lectures 1 hour

- Death determination procedure
- Probable, uncertain and certain signs of death

What a student needs to know:

- Learn the uncertain and certain signs of death
- Learn how to deal with a deceased person
- Learn and understand how to write a death certificate
- Learn how to fill out a death certificate

1 hour of exercises

- Death determination procedure
- Probable, uncertain and certain signs of death

What a student needs to know:

- Learn the uncertain and certain signs of death
- Learn how to deal with a deceased person
- Learn and understand how to write a death certificate
- Understand and become familiar with completing the death form

UNIT 15 (FIFTEENTH WEEK):

SURGICAL CARE PROCEDURES FOR MINOR WOUNDS AND INJURY CARE

lectures 1 hour

- Treatment of minor open injuries, wound treatment, bandaging
- Basic principles of caring for injured persons
- Treatment of head, chest, abdomen, and limb injuries

What a student needs to know:

- Adopt basic principles for the care of minor open injuries
- Learn about wrapping techniques
- Learn about the principles of anti-tetanus protection
- Become familiar with the basic principles and means of immobilization
- Become familiar with the clinical picture, diagnostics, positioning, treatment depending on the pathogenetic phase

1 hour of exercises

- Treatment of minor open injuries, wound treatment, bandaging

What a student needs to know:

- Adopt basic principles for the care of minor open injuries
- Learn about wrapping techniques
- Learn about the principles of anti-tetanus protection
- Become familiar with the basic principles and means of immobilization
- Learn about the method of receiving injured people, diagnosis and care
- Become familiar with the clinical picture, diagnostics, positioning, treatment depending on the pathogenetic phase

TEACHING SCHEDULE FOR THE SUBJECT INTRODUCTION TO CLINICAL PRACTICE

module	Sunday	type	name of the method unit	teacher
1	1	L	Admission of patients for hospital treatment	Ass. Prof. Rada Vucic
1	2	L	General examination of the patient	Ass. Prof. Zeljko Todorovic
1	2	P	Training student for procedure of patient's admission Teaching students for estimation of patient state on admission	1. Ass. Anita Ivosevic 2. Ass. Stefan Simovic 3. Ass. Jelena Zivic 4. Ass. Dragana Bubanja 5. Ass.prof. Tomislav Nikolic
1	3	L	Vital signs	Ass. Prof. Danijela Jovanović
1	4	L	Basic principles of disease diagnosis	Ass. Prof. Rada Vucic
1	4	P	Training student for vital function assessment Teaching students of imaging diagnostics. Radiological diagnostics . Ultrasonic diagnostics .	1. Ass. Anita Ivosevic 2. Ass. Stefan Simovic 3. Ass. Jelena Zivic 4. Ass. Dragana Bubanja 5. Ass.prof. Vladimir Ignjatovic
1	5	L	Endoscopic examinations and patient preparation for examinations	Ass.prof. Zeljko Todorovic
1	6	L	Analysis of patient's excretions	Ass. Prof. Tomislav Nikolić
1	6	P	Teaching students with basics principle of endoscopic examination and preparation patient for radiological and endoscopic reviews Teaching students body fluid collection	1. Ass. Anita Ivosevic 2. Ass. Stefan Simovic 3. Ass. Jelena Zivic 4. Ass. Dragana Bubanja 5. Ass.prof. Tomislav Nikolic
1	7	L	Laboratory diagnostics (biochemical and microbiological analyses)	Ass.Prof. Danijela Jovanovic
1	8	L	Laboratory diagnostics (hematological analyses)	Ass. Prof. Željko Todorović

TEACHING SCHEDULE FOR THE SUBJECT INTRODUCTION TO CLINICAL PRACTICE

module	Sunday	type	name of the method unit	teacher
1	8	P	Teaching students laboratory analyses of blood and urine (biochemical, hematological and microbiological)	1. Ass. Anita Ivosevic 2. Ass. Stefan Simovic 3. Ass. Jelena Zivic 4. Ass. Dragana Bubanja 5. Ass.prof. Zeljko Todorovic
1	9	L	Patient nutrition	Ass. Prof. Miodrag Srećković
1	10	L	Disinfection and sterilization	Ass. Prof. Vladimir Ignjatović
1	10	P	Introducing students to the basics of patient nutrition Introducing students to the basics of disinfection and sterilization	1. Ass. Anita Ivosevic 2. Ass. Stefan Simovic 3. Ass. Jelena Zivic 4. Ass. Dragana Bubanja 5. Ass.prof. Danijela Jovanovic
1	11	L	Application of drugs	Ass. Prof. Tomislav Nikolić
1	12	L	Intensive and semi-intensive care	Ass. Prof. Miodrag Srećković
1	12	P	Introducing students to the procedure for administering prescribed therapy Introducing students to the work of intensive and semi-intensive care	1. Ass. Anita Ivosevic 2. Ass. Stefan Simovic 3. Ass. Jelena Zivic 4. Ass. Dragana Bubanja 5. Ass.prof. Miodrag Sreckovic
1	13	L	Healthcare and patient transport	Ass. Prof. Jelena Vukovic
1	14	L	Death determination procedure	Ass. Prof. Dr. Rada Vučić

TEACHING SCHEDULE FOR THE SUBJECT INTRODUCTION TO CLINICAL PRACTICE

module	Sunday	type	name of the method unit	teacher
1	14	P	Introducing students to the basics of patient health care (patient care, nursing and hygiene in bed). Introducing students to patient monitoring and transportation The procedure for determining death. Probable, uncertain and certain signs of death	1. Ass. Anita Ivosevic 2. Ass. Stefan Simovic 3. Ass. Jelena Zivic 4. Ass. Dragana Bujanja 5. Ass.prof. Rada Vucic
1	15	L	Surgical care of minor wounds and injuries	Assoc. Prof. Dr. Nenad Marković
1	15	P	Treatment of minor open injuries, wound treatment, bandaging	1. Ass. Nenad Stankovic 2. Ass. Goran Balovic 3. Ass. Miladin Boskovic 4. Ass.Dragan Knezevic 5. Ass. Stevan Eric
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