

UNIVERSITY OF ZAGREB SCHOOL OF MEDICINE

Plan of the course

Clinical Biochemistry

Academic year **2016/2017**

prof. dr. sc. Sijetlana Kalanj-Bognar

I. COURSE AIMS

1. COURSE AIMS:

Clinical biochemistry is a biomedical discipline which uses knowledge and understanding of chemical principles, methods and analyses in clinical medicine. The advances in laboratory medicine and clinical biochemistry enable development of various laboratory tests necessary for clarifying normal and pathological conditions in body fluids and tissues. A modern physician should use interdisciplinary approach in his work, and have the knowledge of available laboratory tests and methods helpful in diagnosis of disease in individual patients. Laboratory medicine is useful for both monitoring the course and treatment of the disease as well as in estimating disease prognosis. Clinical biochemistry is involved and has the same importance in final diagnostics, prognostics and therapeutic decisions within each clinical branch.

The *Clinical biochemistry* course is intended to give an overview of recent advances in laboratory medicine and to present state-of-art methodology used for diagnostics in different clinical fields, such as internal medicine, neurology, pediatrics, gynecology etc. The *Clinical biochemistry* course will also provide students with knowledge on organization of clinical laboratory and guidelines for rational selection of diagnostic tests in clinics. The course is focused on giving insight into principles, methods and importance of clinical biochemistry in variety of clinical branches.

II. COURSE STRUCTURE

Course hours:

Lectures: 6

Seminar: 8

Practicum: 11

Total hours: 25

Lectures (L):	6
Seminars (S):	6 (7 h)
Practical (P), including clinical cases:	7
Student presentations/cases:	3 h

Total: 23 hours

III. PLAN OF THE COURSE AND COURSE SCHEDULE

BLOCKS OF THE COURSE

Number of blocks: 1

Block number	Start	End
1.	27.3.2017	31.3.2017

BLOCKS OF THE COURSE SCHEME

Block 1

Date	Time	Group	Course hours type	Theme	Teaching staff
Monday 27.3.2017.	09:30-10:15; MEF Nova vijećnica		Lectures	Introduction to clinical biochemistry - basic characteristics of laboratory tests and their use in clinical decision	prof. dr. sc. Svjetlana Kalanj-Bognar
	10:30-11:15; MEF Nova vijećnica		Lectures	Molecular genetics and diagnostics of inherited diseases	prof. dr. sc. Jadranka Sertić
	11:15-12:00; MEF Nova vijećnica		Seminar	Genomics and proteomics of risk factors for atherosclerosis and cardiovascular diseases	prof. dr. sc. Jadranka Sertić
	12:15-13:00; MEF Nova vijećnica		Lectures	Advances in biochemistry and genetics of hypercholesterolemia and lipoprotein metabolism disorders	izv. prof. dr. sc. Daria Pašalić
Tuesday 28.3.2017.	09:30-11:00; CEPAMED dvorana 1		Seminar	Laboratory diagnostics of hepatic and gastrointestinal disorders	izv. prof. dr. sc. Daria Pašalić
	11:15-12:00; CEPAMED dvorana 1		Seminar	Modern genomic approaches in translational medicine; Microchip analysis in genomics	dr. sc. Kristina Gotovac
	12:15-13:00; CEPAMED dvorana 1		Lectures	Laboratory endocrinology	prof. dr. sc. Vesna Kušec
	13:00-13:45; CEPAMED dvorana 1		Seminar	Laboratory endocrinology	prof. dr. sc. Vesna Kušec
Wednesday 29.3.2017.	09:00-09:45; KBC, edukacijski centar S. Dogan		Lectures	Laboratory diagnosis of coagulation disorders	prof. dr. sc. Renata Zadro
	10:00-10:45; KBC, edukacijski centar S. Dogan		Seminar	Biochemical approach to diagnosis of inherited metabolic disorders	prof. dr. sc. Ksenija Fumić
	11:00-11:45; KBC, edukacijski centar S. Dogan		Practicum	Laboratory methods in coagulation and thrombosis monitoring	prof. dr. sc. Renata Zadro
	12:00-12:45; KBC, edukacijski centar S. Dogan		Practicum	Laboratory diagnostics of metabolic disorders	Karmen Bilić
	13:00-13:45; KBC, edukacijski centar S. Dogan		Practicum	Neurobiochemistry	dr. sc. Željka Vogrinc
Thursday 30.3.2017.	09:00-09:45; KBC, edukacijski centar A. Hahn		Lectures	Nutrition and malnutrition – a clinical approach	prof. dr. sc. Željko Krznarić
	10:00-10:45; KBC, edukacijski centar S. Dogan		Seminar	Therapeutic drug monitoring, pharmacogenomics and clinical toxicology	izv. prof. dr. sc. Nada Božina
	11:00-11:45; KBC, edukacijski centar S. Dogan		Practicum	Laboratory diagnostics of acute intoxication – chromatographic techniques	dr. sc. Mila Lovrić
	12:00-12:45; KBC, edukacijski centar S. Dogan		Practicum	Laboratory diagnostics of acute intoxication – chromatographic techniques	dr. sc. Željka Vogrinc
	13:00-13:45; KBC, edukacijski centar S. Dogan		Practicum	Laboratory diagnostics of rheumatic autoimmune diseases	dr. sc. Ana Kozmar

Date	Time	Group	Course hours type	Theme	Teaching staff
Friday 31.3.2017.	09:30-11:45; CEPAMED dvorana 1		Seminar	Clinical cases presentation	prof. dr. sc. Svjetlana Kalanj-Bognar
	12:00-12:45; CEPAMED dvorana 1	SVI	Exam	Exam	prof. dr. sc. Svjetlana Kalanj-Bognar

IV. EXAMINATIONS

EXAMINATIONS

B. Types of examination and examination dates

Examination includes essay and oral presentation of a clinical case.

Regular terms

Date

Winter

31st March 2017

Summer

July 2017

Autumn

September 2017

V./I. LIST OF LECTURERS AND TEACHING STAFF

1. izv. prof. dr. sc. Daria Pašalić
2. prof. dr. sc. Jadranka Sertić
3. izv. prof. dr. sc. Fran Borovečki
4. izv. prof. dr. sc. Nada Božina
5. prof. dr. sc. Željko Krznarić
6. prof. dr. sc. Svjetlana Kalanj-Bognar

V./II EXTERNAL ASSOCIATES:

1. dr. sc. Kristina Gotovac
2. prof. dr. sc. Renata Zadro
3. prof. dr. sc. Ksenija Fumić
4. Karmen Bilić
5. dr. sc. Željka Vogrinc
6. dr. sc. Mila Lovrić
7. dr. sc. Ana Kozmar

V./III UNTENURED LECTURERS:

1. prof. dr. sc. Vesna Kušec

VI. LITERATURE

A. Obligatory

“Clinical Biochemistry - an Illustrated Colour Text“, 3rd ed, Allan Gaw et al, Churchill Livingstone, 2004 (Selected chapters)

B. Additional

Handouts and references from the field.