



UČNI NAČRT PREDMETA / SUBJECT SPECIFICATION

Predmet:	Klinična biokemija
Subject Title:	Clinical Biochemistry

Študijski program Study programme	Študijska smer Study field	Letnik Year	Semester Semester
Splošna medicina General Medicine - EMŠP		3	5

Univerzitetna koda predmeta / University subject code:

Predavanja Lectures	Seminar Seminar	Sem. vaje Tutorial	Klin. vaje Clin work	Teren. vaje Field work	Samost. delo Individ. work	ECTS
15	15		30		30	3

Nosilec predmeta / Lecturer: Izred. prof. dr. Ivan Malešič

Jeziki /

Predavanja / Slovenski / Slovenian
Vaje / Tutorial: Slovenski / Slovenian

Pogoji za vključitev v delo oz. za opravljanje študijskih obveznosti: Prerequisites:

Vsebina:

PREDAVANJA: Uvod v klinično biokemijo, sigurnost metod v klinični biokemiji in referenčne vrednosti, biološki vzorci - vrste analiznega materiala, seč in urinske preiskave, beljakovine v krvni plazmi, neproteinske dušikove spojine v krvnem serumu, lipidi in lipoproteini, motnje v presnovi ogljikovih hidratov, sladkorna bolezen: diagnostika in kontrola terapije, acidobazno ravnovesje in plinska analiza krvi, voda in elektroliti, laboratorijska endokrinologija, klinična encimologija.
VAJE: Hematološke preiskave, urinske preiskave, določanje acidobaznega ravnovesja in elektrolitov, analitika beljakovin v serumu, določanje neproteinskih dušikovih spojin, bilirubina in drugih pomembnih metabolitov v serumu, imunološke preiskave, določanje koncentracij zdravilnih učinkovin v biološkem materialu, ogled klinično-biokemičnih laboratorijev.

Content (Syllabus outline):

LECTURES: Introduction into Clinical Biochemistry, safety of methods in Clinical Biochemistry and reference values, biological patterns - sorts of analytical samples, urin and urinalysis, the plasma proteins, nonprotein nitrogenous compounds in serum, lipids and lipoproteins, disturbances in carbohydrate metabolism, Diabetes mellitus: diagnostics and laboratory monitoring of treatment, acide - base equilibrium and blood gas analysis, watter and electrolytes, laboratory endocrinology, clinical enzymology.
Laboratory work: Laboratory Hematology, examination of the urin, acide - base equilibrium and electrolytes analysis, analytical techniques for protein determination, nonprotein nitrogenous compounds, bilirubin and other important metabolites in serum, immunodiagnostic procedures, therapeutic drug monitoring, a visit to clinical-biochemical laboratorys.

Temeljni literatura in viri / Textbooks:

1. Burtis CA, Ashwood ER, Bruns DE. Tietz Textbook of Clinical Chemistry and Molecular Diagnostics, 4th ed. Elsevier Saunders, St. Louis. 2006.
 2. Thomas L. Labor und Diagnose, 6. auflage, TH - Books Verlagsgesellschaft GmbH, Frankfurt/Main. 2005.
 3. Kaplan LA, Pesce AJ, Kazmierczak SC. Clinical Chemistry Theory, Analysis, Correlations 4th ed. Mosby. 2003.
 4. Devlin TM. Textbook of biochemistry with clinical correlations. 5th edition. Wiley-Liss, New York. 2002.
 5. Henry JB. Clinical Diagnosis and Management by Laboratory Methods. WB Saunders Company, Philadelphia. 2001.

Cilji:

Predmet študenta teoretično in praktično seznani s področjem klinične biokemije. Na predavanjih posluša o pomembnosti klinično-biokemičnih preiskav v sodobni diagnostiki, seznani se tudi z analitiko teh preiskav. Na vajah vrši sam, ali v skupini, nekatere analizne postopke pregleda bioloških vzorcev.

Objectives:

The subject introduces the student theoretically and practically to the area of Clinical Biochemistry. Lectures give information about the importance of clinical-biochemical examinations in modern diagnostics as well as analytical procedures. In laboratory practice the student carries out some analytical procedures of examinations of biological samples, either alone or in group.

Predvideni študijski rezultati:

Intended learning outcomes:

Znanje in razumevanje:

Študent mora zahtevano znanje in razumevanje predmeta potrditi s kolokvijem iz vaj in izpitom.

Knowledge and Understanding:

Student must confirm the demented knowledge and understanding with examination of laboratory practice and final examination.

Prenesljive/ključne spretnosti in drugi atributi:

Pridobljeno znanje študent koristi in prenese za razumevanje diagnostike bolezni v interni medicini, pediatriji, ginekologiji in onkologiji.

Transferable/Key Skills and other attributes:

Acquired knowledge is useful for student and helpful to understand diagnostics of diseases in internal medicine, pediatrics, gynecology and oncology.

Metode poučevanja in učenja:

Learning and teaching methods:

Predavanja
Laboratorijske vaje

Lectures
Laboratory practice

Delež (v %) /

Načini ocenjevanja:

Assessment:

Weight (in %)

Način (pisni izpit, ustno izpraševanje, naloge, projekt)

Pisni izpit

Ustno izpraševanje

70

30

Type (examination, oral, coursework, project):

written examination

oral examination