



Univerza v Mariboru
University of Maribor

Medicinska fakulteta
Faculty of medicine



OPIS PREDMETA / SUBJECT SPECIFICATION

Predmet:	Kirurgija
Subject Title:	Surgery

Študijski program Study programme	Študijska smer Study field	Letnik Year	Semester Semester
Splošna medicina General medicine - EMŠP	Splošna medicina General medicine	3.	5, 6

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
60	150		75		255	18

Nosilec predmeta / Lecturer:

Izred. prof. dr. Kazimir Miksič
Izred. prof. dr. Anton Crnjac (sonosilec)

Jeziki /
Languages:

Predavanja /
Lecture:
Vaje / Tutorial:

Slovenščina/Slovene

Slovenščina/ Slovene

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

Prerequisites:

Vsebina:

V okviru kirurške propedeutike mora študent obvladati:

- Osnovne postopke klinične preiskave: palpacijo, perkusijo, avskultacijo
- Anamnezo
- Diagnostične postopke
- Klinične veščine: jemanje krvi, dajanje injekcij, katetrizacija sečnega mehurja, venepunkcija, vstavljanje nazogastrične sonde
- Priporočila bolnikom o pooperativnem obdobju
- Komuniciranje

Content (Syllabus outline):

In connection with surgical propedeutics the student must be fully acquainted with:

- Basic methods of clinical examination: inspection, palpation, percussion, auscultation
- Anamnesis
- Diagnostic methods
- Clinical skills: venous puncture, application of injections, catheterization of urinary bladder
- Recommendations regarding postoperative period
- Communication

V sklopu kirurgije mora študent obvladati temeljna kirurška znanja iz naslednjih področij:

I. Temeljni kirurški principi

- Etika in kirurgija
- Molekularna biologija celic
- Šok, elektroliti in tekočine
- Hematološki principi v kirurgiji
- Metabolizem kirurškega bolnika
- Celjenje ran
- Klinična ocena kirurškega zdravljenja

II. Periperativna terapija

- Temeljna načela perioperativne in operativne kirurgije
- Diagnostični postopki
- Kirurške okužbe in izbor antibiotika
- Kirurški problemi pri imunološko prizadetem bolniku
- Kirurški zapleti
- Kirurgija starostnika
- Anesteziologija
- Minimalna invazivna kirurgija
- Nove tehnologije v kirurgiji

III. Travma in intenzivna kirurška oskrba

- Oskrba pri akutnih poškodbah
- Nujna oskrba mišično-skeletnih poškodb
- Opekline
- Ugrizi in vbodi
- Kirurgova vloga v katastrofnih razmerah
- Kirurška intenzivna nega

IV. Presajanje in imunologija

V. Kirurška onkologija

- Biologija tumorjev in tumorski označevalci
- Melanom
- Tumorji mehkih tkiv in kostni tumorji

VI. Glava in vrat

VII. Dojka

VIII. Endokrine motnje

IX. Ezofagus

In connection with Surgery the student must master the basic surgical knowledge of the following sections:

- **Section I. Surgical basic principles**

Ethics in surgery

Molecular and cell biology

Shock, electrolytes and fluid

Hematologic principles in surgery

Metabolism in surgical patients

Wound healing

Clinical assessment of surgical outcomes

- **Section II. Perioperative management**

Principles of perioperative and operative Surgery

Diagnostic procedures

Surgical infections and choice of antibiotics

Surgical problems in immunosuppressed patients

Surgical complications

Surgery in elderly

Anesthesiology

Minimally invasive surgery

Emerging technologies in Surgery

- **Section III. Trauma and critical care**

Management of acute trauma

Emergency care of musculoskeletal injuries

Burns

Bites and stings

The surgent role in unconventional civilian disasters

Surgical critical care

- **Section IV. Transplantation and immunology**

- **Section V. Surgical oncology**

Tumor biology and tumor markers

Melanoma

Soft tissue sarcomas and bone tumors

- **Section VI. Head and neck**

- **Section VII. Breast**

Diseases of the breast

Breast reconstruction

- **Section VIII. Endocrine**

- Hiatalna hernija in gastroezofagealni refluks

X. Abdomen

- Akutni abdomen
- Krvavitve iz gastrointestinalnega trakta
- Abdominalna stena, peritonej, oporek, retroperitonealni prostor
- Kile
- Želodec
- Ozko črevo
- Apendiks
- Kolon in rektum
- Anus
- Jetra
- Biliarni trakt
- Trebušna slinavka
- Vranica

XI. Prsni koš

- Stena prsnega koša in plevra
- Mediastinum
- Pljuča
- Prirojene srčne bolezni
- Kirurško zdravljenje koronarne bolezni
- Pridobljene bolezni srca: zaklopke

XII. Žilna kirurgija

- Endovaskularna kirurgija
- Torakalno žilje
- Cerebrovaskularna bolezen
- Aneurizme
- Periferna arterijska obliterativna bolezen
- Poškodbe žil
- Bolezni ven
- Dostopi v žilje

XIII. Posebna področja kirurgije

- Pediatrična kirurgija
- Nevrokirurgija
- Plastična kirurgija
- Urologija
- Ortopedija

- **Section IX. Esophagus**

Hiatal hernia and gastroesophageal reflux disease

- **Section X. Abdomen**

Acute abdomen

Acute gastrointestinal hemorrhage

Abdominal wall, umbilicus, peritoneum, mesenteris, omentum, retroperitoneum

Hernias

Stomach

Small intestine

Appendix

Colon and rectum

Anus

The liver

Biliary tract

Pancreas

Spleen

- **Section XI. Chest**

Chest wall and pleura

The mediastinum

Lung

Congenital heart disease

Surgical treatment of coronary artery disease

Acquired heart disease: valvular

- **Section XII. Vascular**

Endovascular surgery

Thoracic vasculature

Cerebrovascular disease

Aneurysmal vascular disease

Peripheral arterial occlusive disease

Vascular trauma

Venous disease

Access and ports

- **Section XIII. Specialties in general surgery**

Pediatric surgery

Neurosurgery

Plastic surgery

Urologic surgery

Orthopedic surgery

Temeljni študijski viri / Textbooks:

1. Arnež Z., Smrkolj V. ured. Kirurgija. Sledi. Ljubljana 1995.
2. Miksić K, Flis V. ured. Izbrana poglavja iz kirurgije. Obzorja. Maribor 2003.
3. Townsend CM et al. Eds. Sabiston's Textbook of surgery. WB Saunders. 17th ed. Philadelphia 2004.
4. Pierce AG., Borley RN. Surgery at a glance. Blackwell Science. Oxford 2002.
5. Brunicaudi FC et al. Eds. Schwartz's Principles of Surgery. McGraw-Hill. 8th ed. New York. 2004

Cilji: Cilj predmeta je pripraviti študente na samostojno delo s kirurškimi bolniki

Objectives: The objective of the course is to prepare students for independent work with surgical patients

Predvideni študijski rezultati:

Znanje in razumevanje: po zaključku tega predmeta bo študent sposoben samostojno pristopiti k bolniku, obvladal bo odnos z njim in svojci, znal bo vzeti anamnezo, pregledati bolnika, ovrednotiti diagnostične metode

Prenesljive/ključne spretnosti in drugi atributi:

Študent se bo naučil praktičnih veščin, potrebnih za delo z bolniki: jemanje krvi, dajanje injekcij, opravljanje punkcij, kateterizacija mehurja, pisanje receptov

Metode poučevanja in učenja:

- Predavanja
- Seminarji (obvezno)
- Vaje (obvezno)

Intended learning outcomes:

Knowledge and Understanding: On completion of this course the student will be able to approach the patient independently, and communicate accordingly with the patient and his family members, he will take the history of illness, examine the patient, and evaluate the diagnostic methods to be applied.

Transferable/Key Skills and other attributes: The student will acquire the necessary practical knowledge, withdrawing of blood, giving injections, performing of punctures and bladder catheterization, making prescriptions.

Learning and teaching methods:

- Lectures
- Seminars (obligatory)
- Work in the wards (obligatory)

Načini ocenjevanja:

Delež (v %) /
Weight (in %)

Assessment:

Način (pisni izpit, ustno izpraševanje, naloge, projekt): projektno delo, seminarska naloga:

- Seminar
- Kolokvij
- Pisni izpit
- Ustno izpraševanje

10
50
30
10

Type (examination, oral, coursework, project): project work, report:

- Completed seminar
- Partial exam
- Written examination
- Oral examination