
	UNIVERSITY OF EAST SARAJEVO					
	Faculty of Medicine					
	Study program: Medicine					
	Integrated academic studies		V study year			
Full course title	SURGERY					
Department	Department of Surgery, Faculty of Medicine in Foča					
Course code		Course status		Semester	ECTS	
ME-04-1-045-9, ME-04-1-045-10		compulsory		IX, X	27	
Teacher/s	Professor Veljko Marić, MD, PhD; Professor Milomir Ninković, MD, PhD; Professor Radojica Jokić, MD, PhD; Associate professor Zoran Radovanović, MD, PhD; Assistant; Associate professor Sanja Marić, MD, PhD; Associate professor Radmil Marić, MD, PhD; Associate professor Vjeran Saratlić, MD, PhD; Associate professor Milivoje Dostić, MD, PhD; Associate professor Dražan Erić, MD, PhD; Associate professor Maksim Kovačević, MD, PhD; Assistant professor Milorad Bijelović, MD, PhD, Assistant professor Nenad Lalović					
Associate/ - s	Senior assistant Rade Miletić, MD, MSc; Senior assistant Helena Marić, MD, assistant Dalibor Potpara, MD; assistant Senka Milić, MD; assistant Đorđe Veljović, MD; assistant Vanja Starović, MD; clinical assistant Zoran Šarenac, MD,					
The number of teaching hours/ teaching workload (per week)		Individual student workload (in hours per semester)			Coefficient of student workload S₀¹	
L	E	SP	L	E	SP	S₀
5	7	2.66	5*15*0.9	7*15*0.9	2.66*15*0.9	0.9
5	6	2.66	5*15*0.9	6*15*0.9	2.66*15*0.9	0.9
Total teaching workload (in hours, per semester) 5*15 + 7*15 + 2.66*15 = 220 5*15 + 6*15 + 2.66*15 = 205			Total student workload (in hours, per semester) 5*15*0.9+ 7*15*0.9+ 2.66*15*0.9= 199 5*15*0.9+ 6*15*0.9+ 2.66*15*0.9= 186			
Total subject workload (teaching+student):425 + 385 = 810 ,hours						
Learning outcomes	<p>1. Students are expected to master basic communication skills with patients, patients' relatives and colleagues, as well as teamwork principles and the basics of ethics.</p> <p>2. Students are expected to master particularities of taking anamnesis and physical examination of a surgical patient.</p> <p>3. While attending lectures, students acquire all the necessary knowledge of pathogenesis, clinical presentation and treatment of diseases and conditions of adult population, related to all surgical specialties.</p> <p>4. Particular attention is paid to the importance of preventive medical procedures.</p> <p>5. While attending practical work, students develop clinical skills in all surgical specialties, patients' examination, diagnostic and differential diagnostic procedures, interpretation of X-ray images, get acquainted with interpretation of medical findings, endoscopic procedures, acute management of an injured patient and other acute surgical conditions.</p>					
Preconditions	Precondition for taking the exam: all of the fourth year exams passed					
Teaching methods	Lectures, practical exercises, problem-based learning, work on phantoms, case presentations, seminar papers, using simulation software, consultations					

¹Coefficient of student workload S₀ is calculated as it follows:

a) for the study programs not going through the licensing process: S₀ = (total workload in semester for all of the subjects 900 hrs – total teaching workload L+E in semester for all of the subjects 870 hrs)/ total teaching workload L+E in semester for all of the subjects ____ hrs = ____ . Consult form content and its explanation.

b) for the study programs going through the licensing process, it is necessary to use form content and its explanation.

<p>Course content per week</p>	<p>SYLLABUS OF THE THEORETICAL SURGERY LECTURES</p>
	<p>Introduction to Surgery, general principles</p> <ol style="list-style-type: none"> 1. Introduction (2 hours) 2. Methods of surgical prophylaxis (1 hours) 3. Surgical infections (2 hours) 4. Injuries, hemorrhage and hemostasis (3 hours) 5. Surgical wound and tissue transplant (2 hours) <p>Anesthesia, Resuscitation and Pain Management</p> <ol style="list-style-type: none"> 6. Anesthesia and analgesia (2 hours) 7. Anesthesia and analgesia, water and electrolyte balance (1 hour) 8. Cardiopulmonary resuscitation (2 hours) 9. Shock and blood transfusion (2 hours) 10. Basic principles of surgical diagnostics (3 hours) 11. Preoperative preparation and postoperative care (2 hours) <p>Heart and vascular surgery</p> <ol style="list-style-type: none"> 12. Heart and large blood vessels surgery (2 hours) 13. Pulmonary embolism (1 hour) 14. Pericardium, heart tumours, heart defects. Fundamentals of electrical stimulation. (3 hours) 15. Peripheral vascular surgery , surgically correctable hypertension хипертензија (8 hours) <p>Abdominal surgery</p> <ol style="list-style-type: none"> 16. Esophageal and diaphragmatic surgery (2 hours) 17. Endocrine surgery- thyroid and parathyroid gland (2 hours) 18. Abdominal wall (2 hours) 19. Acute abdomen (3 hours) 20. Manifestations of digestive diseases, stomach and duodenum (5 hours) 21. Small intestine, appendix, ileum (5 hours) 22. Colon surgery, rectum and anus (5 hours) 23. Liver surgery (5 hours) 24. Gallbladder, bile ducts, pancreas and spleen (3 hours) 25. Endocrine surgery- endocrine pancreas, adrenal (2 hours) 26. Retroperitoneum (2 hours) 27. Oncological surgery (3 hours) <p>Plastic and reconstructive surgery</p> <ol style="list-style-type: none"> 28. Plastic and reconstructive surgery (4 hours) 29. Oncological surgery (1 hour) <p>Chest surgery</p> <ol style="list-style-type: none"> 30. Chest surgery- introduction and basic principles (5 hours) 31. Chest surgery- chest wall injuries, lung diseases (5 hours) 32. Chest surgery- pneumothorax , thoracic drainage (3 hours) <p>Urology</p> <ol style="list-style-type: none"> 33. Prostate, tumors in urology (5 hours)

34. Semiology of urologic diseases, diagnostic methods in urology, TB, urolithiasis (5 hours)
35. Inflammation processes of the urinary tract. (2 hours)
36. Andrology, urogenital injuries, kidney transplant (3 hours)

Orthopedics and traumatology

37. Orthopedics, bone and joint infections, developmental diseases (5 hours)
38. Osteoporosis, tumors, diseases of the spine, hips, knee and feet (5 hours)
39. Traumatology, vertebral column, pelvis and hips, lower extremities. (5 hours)
40. Arthroscopy, replantation, modern principles of fracture management and treatment (3 hours)
41. Emergencies and mass casualty incidents surgery (3 hours)

Neurosurgery

42. Cerebrovascular diseases, CNS tumors (2 hours)
43. Spine and spinal cord, congenital malformations of the CNS (2 hours)
44. Peripheral nerves (2 hours)
45. CNS infections, pain surgery, functional neurosurgery (2 hours)
46. Injuries of the head and brain (2 hours)

Pediatric surgery

47. Pediatric surgery – introduction, chest wall, congenital anomalies (3 hours)
48. Pediatric surgery- pediatric orthopedics and traumatology (2 hours)
49. Pediatric surgery- urology, abdominal surgery, thoracic and cardiovascular surgery, emergencies (5 hours)

SYLLABUS OF THE PRACTICAL SURGERY EXERCISES

Introduction to surgery, general principles

- 1 Introduction exercises, Methods of surgical prophylaxis, Surgical infections (7 hours)
- 2 Injuries, surgical wound, hemorrhage and hemostasis, Blood transfusion (7hours)

Anesthesia, resuscitation and pain management

- 3 Tissue transplant, Tumor surgery, Anesthesia and analgesia (7 hours)
- 4 Water and electrolytes balance, Cardiopulmonary resuscitation , Shock (7hours)

Heart and vascular surgery

- 5 Esophageal and diaphragmatic surgery, Heart and large blood vessels surgery, Pulmonary embolism (7 hours)
- 6 Pericardium, heart tumors, heart defects, Fundamentals of electrical stimulation, Peripheral vascular surgery , Surgically correctable hypertension (7 hours)

Abdominal surgery

- 7 Abdominal wall, Endocrine surgery (7hours)
- 8 Acute abdomen, Manifestations of the digestive diseases, stomach and duodenum (7 hours)
- 9 Small intestine, apendix, ileum, Colon surgery (7 hours)
- 10 Rectum and anus, liver surgery (7 hours)
- 11 Gallbladder, bile ducts, pancreas and spleen (7 hours)

	Plastic and reconstructive surgery			
	12	Plastic and reconstructive surgery, Oncological surgery (7hours)		
	Chest surgery			
	13	Chest surgery (4 hours)		
	Urology			
	14	Urology, semiology of urologic diseases; diagnostic methods in urology (3 classes 3 часа)		
	15	Urology, TB of the genitourinary tract, calculosis of the urinary tract; Urology, tumors; Urology, prostate (7hours)		
	16	Urology, andrology, inflammatory processes of the urinary tract, injuries, kidney transplant (7hours)		
	Orthopedics and traumatology			
	17	Orthopedics, diagnostics, principles and methods of treatment, bone and joint infections, developmental diseases, osteoporosis, bone and cartilage tumors (6 hours)		
	18	Orthopedics, diseases of the vertebral column, hips, knee and feet (6 hours)		
	19	Traumatology, introduction, upper and lower extremities (6 hours)		
	20	Traumatology, hand, vertebral column, pelvis, hips; modern methods and options in fracture management and treatment (6 hours)		
	Neurosurgery			
	21	Neurosurgery, injuries of the head and brain, pain surgery, functional neurosurgery (6 hours)		
	22	Neurosurgery, tumors, cerebrovascular diseases, spine and spinal cord (6 hours)		
	23	Neurosurgery, congenital malformations of the CNS, infections of the CNS, peripheral nerves (6 hours)		
	Pediatric surgery			
	24	Pediatric surgery, physical examination, diagnostics, preoperative preparation and postoperative care, anesthesia and resuscitation in children; Pediatric surgery, reconstructive surgery in children (6 hours)		
	25	Pediatric surgery, cardiosurgery, chest wall, trauma, inguinal canal pathology (6 hours)		
	26	Pediatric surgery, neonatal surgery, surgical oncology (6 hours)		
	27	Urology, tumors; Pediatric surgery, traumatology of the bone and joint, orthopedics (6 hours)		
	28	Pediatric surgery, urology; Pediatric surgery, congenital malformations of the urinary tract, vesicoureteral reflux and obstructive uropathies in developmental age (6 hours)		
	29	Pediatric surgery, emergencies (3 hours)		
	Emergencies			
	30	Emergencies and mass casualty incidents surgery (9 hours)		
	31	Chest surgery, emergencies; Urology, emergencies (6 hours)		
	Compulsory literature			
	Author/s	Publication title, publisher	Year	Pages (from-to)
Townsend C, Beauchamp RD, Evers BM. Sabiston.	Textbook of Surgery, 19 th edition. Elsevier Saunders,.	2012		
Brunnicardi FC.	Schwartz's Principles of Surgery, 10 th edition. McGraw	2015		

	Hill Education,			
Joe Tjandra, Gordon J.A. Clunie, Andrew H, Kaye, Jullan.	Textbook of Surgery, 3rd ed.	2005		
Additional literature				
Author/s	Publication title, publisher	Year	Pages (from-to)	
Student responsibilities, types of student assessment and grading	Grading policy		Points	Percentage
	Pre-exam activities			
		lecture/exercise attendance	10	10%
		test/ colloquium	20	20%
		practical work	20	20%
	Final exam			
		practical exam	25	25%
		written exam	25	25%
	TOTAL	100	100 %	
Certification date	December 13 th 2018			

* the number of necessary rows is added by using *insert mode*