



SUBJECT OUTLINE

1. Programme of study description

1.1.	THE "CAROL DAVILA" UNIVERSITY OF MEDICINE AND PHARMACY
1.2.	THE FACULTY OF MEDICINE / 10 TH CLINICAL DEPARTMENT GENERAL SURGERY
1.3.	DISCIPLINE GENERAL SURGERY
1.4.	DOMAIN OF STUDY: Healthcare – regulated sector within the EU
1.5.	CYCLE OF STUDIES: BACHELOR'S DEGREE
1.6.	PROGRAMME OF STUDY: MEDICINE

2. Subject description

2.1.	Name of the compulsory subject subject within the discipline: General Surgery						
2.2.	Location of the discipline:						
2.3.	Course tenured coordinator:						
2.4.	Practicals/clinical rotations tenured coordinator:						
2.5. Year of study 4 th		2.6. Semester		2.7. Type of assessment	Practical and theoretical	2.8. Subject classification	Mandatory

3. Total estimated time (hours/semester of didactic activity) – teaching module

Number of hours per week	25	Out of which: course	10	Clinical rotation	15
Total number of hours from curriculum	180	Out of which: course	72	Clinical rotation	108
Distribution of allotted time	4 th year – 8 weeks		2 hours / day		3 hours / day
Study from textbooks, courses, bibliography, and student notes					2 hours
Additional library study, study on specialized online platforms and field study					6 hours
Preparing seminars / laboratories, assignments, reports, portfolios and essays					2 hours
Tutoring					4 hours
Examinations					10 hours
Other activities					10 hours
Total hours of individual study					34 hours
Number of credit points					11

4. Prerequisites (where applicable)

4.1. of curriculum	Fundamental knowledge of human anatomy and physiology
4.2. of competencies	General and local clinical examination of the patient

5. Requirements (where applicable)

5.1. for delivering the course	Laptop / projector / Amphitheatre
5.2. for delivering the clinical rotation	Surgical Clinic – General Surgery Ward



6. Acquired specific competencies

Professional competencies (expressed through knowledge and skills)	<p>At the end of the surgical rotation the student should be capable of describing the fundamental notions (anatomy, pathophysiology, clinical presentation, treatment options, postoperative care and follow up) for the main surgical pathologies of the general surgical field including digestive tract, upper and lower limbs, surgical emergencies.</p> <p>The student should be able to conduct a thorough clinical examination of the surgical patient, interpret paraclinical investigations, imagistic studies and other tools of investigations.</p> <p>Basic surgical skills and wound care notions</p>
Transversal competencies (of role, of professional and personal development)	<p>Identifying the main objectives, available resources and personal professional development</p> <p>Proficient use of informational resources</p> <p>Identifying the roles and responsibilities incumbent to every member of the multidisciplinary team</p> <p>Assesment of risk stratification</p> <p>Development of empathy towards the patient and medical deontology.</p>

7. Subject learning objectives (based on the scale of acquired specific competencies)

7.1. General learning objective	The student should be able to properly diagnose different surgical pathologies, correct diagnosis of a surgical emergency and treatment principles.
7.2. Specific learning objectives	<p>Clinical examination of the surgical patient</p> <p>Interpretation of general and specific paraclinical investigations for the surgical patient</p> <p>Devising and implementing a targeted management plan for individual patients</p> <p>Efficient communication with the surgical patient</p> <p>Basic surgical skills such as wound care, suturing a wound, wound dressing, nazogastric tube / urinary cathether placement etc</p>

8. Content

8.1. Course	Teaching methods	Observations
Course 1 Surgical history and the history of the Surgical Clinic of the hospital	<p>Lectures are held in the Amphitheatre of Bucharest Emergency Clinical Hospital which is fitted with an interactive electronic board, projector, and laptop.</p> <p>The lectures are on digital format (as power point presentations which include illustrative pictures, photos from the Clinics archive, videos and short clips).</p> <p>The lectures are updated yearly in concordance with the national and international guidelines, treaties and</p>	2 hours
Course 2 Surgical infection		
Course 3 Localized surgical infection		
Course 4 Generalized surgical infection / Septic shock		
Course 5 Contusions, eschars. Wound healing		
Course 6 The diabetic foot		
Course 7 Politrauma		
Course 8 Surgical semiology of arterial pathology		
Course 9 Surgical semiology of venous pathology		
Course 10 Thromboembolic disease in surgical pathology		



	<p>textbooks.</p> <p>The lectures are intended to be as interactive as possible with case presentations and ‘questions and answers’ sessions with the students.</p>		
Course 11 Chest trauma			
Course 12 Pulmonary hydatid cyst			
Course 13 Benign breast pathology – trauma and infections			
Course 14 Malignant breast pathology			
Course 15 Pathology of the abdominal wall – external hernias			
Course 16 Pathology of the abdominal wall – internal hernias			
Course 17 Pathology of the abdominal wall – incisional hernias			
Course 18 Benign thyroid pathology			
Course 19 Malignant thyroid pathology			
Course 20 Benign esophageal pathology			
Course 21 Duodenal ulcer			
Course 22 Gastric ulcer			
Course 23 Malignant gastric pathology			
Course 24 Surgical pathology of the small intestine			
Course 25 Inflammatory pathology of the small intestine			
Course 26 Fundamentals of transplant surgery			
Course 27 Legal and deontological aspects of medical practice in Romania			
8.2. Clinical rotation		Teaching methods	Observations
CR 1 Aseptic measures		<p>Prevention of contamination and work related accident</p> <p>Getting familiar with the surgical patient</p> <p>Clinical examination of the surgical patient</p> <p>Filling in the surgical chart of the patient</p> <p>Paraclinical investigations – use and interpretation</p> <p>Clinical presentations</p> <p>Morning rounds participation</p> <p>Differential diagnosis</p> <p>Surgical patient management</p> <p>Postoperative follow up</p>	<p>3 hours</p>
CR 2 Preoperative preparation of the patient			
CR 3 Surgical instruments			
CR 4 Types of incisions / surgical debridement			
CR 5 Venous and arterial catheterization			
CR 6 Intradermic / subcutaneous / intramuscular injections / endovenous line placement			
CR 7 Blood transfusion			
CR 8 Wound care			
CR 9 Fine needle biopsy			
CR 10 Thoracocentesis / Paracentesis			
CR 11 Hemostasis			
CR 12 Wound suturing			
CR 13 Nazogastric tube			
CR 14 Urinary catheterisation			



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CR 15 Chest tube placement	Participation in the operating room as observers	
CR 16 Cardiac arrest		
CR 17 CPR procedure		
CR 18 Postoperative follow up		
CR 19 Peripheral pulse palpation		
CR 20 Clinical examination of the venous system		
CR 21 Clinical examination of the lymphatic system		
CR 22 Clinical examination of the inghino-femoral region		
CR 23 Clinical examination of incisional hernias		
CR 24 Clinical examination of the breast		
CR 25 Clinical examination of the thyroid gland		
CR 26 Clinical examination of the thorax		
CR 27 Clinical examination of the stomach		
CR 28 Clinical examination of the small intestine		
CR 29 Laparoscopic surgical instruments		

Bibliography for course and clinical rotation

Course of Surgery for the 4th and 5th year students Vol. I – Coordinator: Mircea Beuran, MD, PhD, FACS, Professor of Surgery, "Carol Davila" University Press, Bucharest, 2016 – ISBN 978-973-708-884-0

9. Corroboration of the subject content with the expectations of the representatives of the epistemic community, professional associations, and major employers in the field of the programme of study

Proper training of the medical student during surgical rotations should constitute a benchmark for residency and future professional development

10. Assessment

Type of activity	Assessment criteria	Assessment methods	Assessment weighting within the final grade
Course	Knowledge of fundamental theoretical notions of the lectures	100 questions out of which 60 questions with single choice answer and 40 questions with multiple choice answer	90 %
	Daily routine during the clinical rotations / activity / clinical case presentations /		10 %
Clinical rotation	Knowledge and execution of main clinical maneuvers	Practical examination with the group coordinator	Pass / Fail
	Ability of interpreting clinical and paraclinical investigations / formulation of a	Practical examination with the Professor / Assoc Professor	Pass / Fail



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	diagnosis and treatment options		
Minimum performance standard			
Minimal grad for passing: 5 (five)			

Date of filing	Signature of the course tenured coordinator Professor of surgery Mircea Beuran MD, PhD, FACS	Signature of the tenured coordinator Assoc Professor Turculet MD, PhD	seminar Claudiu
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Date of approval in the Council of the Department:	Signature of the Head of the Department Professor of surgery Traian Patrascu MD, PhD
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