Course Title	**General Surgery**						
Course Code	**MED-602**						
Course Type	Required						
Level	Undergraduate						
Year / Semester	Year 6/ Semester 11 (Fall)						
Teacher's Name	**Course Lead:** Dr Marios Karaiskakis						
ECTS	10	Lectures / week	4	Laboratories / week	0	Clinical Practice	36
Course Purpose and Objectives	The main objectives of the last two years of the six year medical programme are to provide students with extensive experience in the clinical environment, mainly in hospitals but also in the community, so that they can utilise their learning over the previous four years to practise their clinical, communication, diagnostic and reasoning skills on real patients, and to learn about the management of patients, from a medical, therapeutic, surgical, psychosocial and caring perspective. In this course, students will spend six weeks working with patients who present with a surgical problem across any sub-specialty of surgery. They will develop an understanding of the presentation, signs and symptoms, physical examination findings, investigations, diagnosis, treatment (medical and surgical) and management plan for a wide range of conditions. Students will be "on call" in the Emergency Room to receive and clerk patients. They will spend most of their time on wards, in theatre and in outpatient clinics. They will try to follow their patients throughout their treatment to build up some continuity of care. They will take part in all ward activities, working alongside other doctors, nurses, physiotherapists, occupational therapists, pharmacists, social workers – any healthcare professional involved in patient care – in order to understand the roles each healthcare professional undertakes and the importance of teamwork. They will take histories (clerking), carry out physical examinations, suggest investigations and interpret the findings with a view to reaching a diagnosis and starting treatment. They will take part in ward rounds, team meetings, theatre sessions, radiology, and pathology meetings and will present their patients to the rest of the team. They will keep accurate records (using an agreed template). The overall aims of the attachment are as follows: • To gain experience of patient care as part of a clinical team. • To become proficient in diagnosis and formulation of management plans. • To develop an adequate knowledge base for understanding common problems in general surgery.							

	• To practise basic surgical skills, such as hand-washing, gowning and gloving, and to observe (and take part, if appropriate) in operations and other surgical procedures. • To learn about anesthetics and airway management during their time in theatre. • To develop clinical reasoning and problem solving skills at the bedside, in outpatients and in theatre. • To develop high standards of professional behavior. • To continually reinforce basic and clinical science principles learnt during the earlier part of the course.		
Learning Outcomes	By the end of the course, students will be able to: 1. Take a competent history from a patient, or relative of a patient, presenting with a condition requiring surgical intervention, in a sensitive and caring manner. 2. Carry out a physical examination of patients. 3. Come up with a differential diagnosis for the presenting complaint. 4. Identify appropriate investigations, including blood, urine and faecal tests and imaging, to assist in the diagnosis of the presenting complaint and to interpret the results from such tests. 5. Prepare a surgical treatment management plan for the patient to present to the responsible surgeon. 6. Apply clinical reasoning and problem solving skills at the bedside, in outpatients and in theatre, using hypothesis generation, data gathering, integration of basic science, clinical medicine and evaluation of opinions. 7. Demonstrate knowledge of common surgical problems and surgical emergencies 8. Perform procedures common to general surgery – aseptic technique, scrubbing, gowning & gloving, suturing, use of local anaesthetic for suturing, removal of sutures and staples, freezing and cautery, endoscopic procedures (observed only), wound management, wound dressing and bandaging, management of leg ulcers and burns, control of haemorrhage, airway maintenance, bag and mask, resuscitation, venepuncture, insertion of intravenous cannulae, arterial puncture, urinary catheter, setting up an intravenous fluid infusion, administration of an intravenous injection, intramuscular injection, subcutaneous injection, administration of oxygen, diagnosis of death, male and female urinary catheterization. 9. Demonstrate high professional standards and attitudes regarding relationships in the workplace, team work, confidentiality, initiative, self-directed learning an ethical issues.		
Prerequisites	None	Required	None
Course Content	• History taking • Problem formulation		

	• Differential diagnosis • Development of surgical (and medical) management plans • Discriminatory use of investigations • Examination of: ❖ head & neck, thyroid and lymph nodes, eye, ear, nose and throat ❖ respiratory system ❖ breast and axillae ❖ cardiovascular system ❖ vascular system, including venous circulation in legs ❖ abdomen – liver, spleen and bowel ❖ rectal examination – digital, proctoscope ❖ renal system, including dipstick analysis ❖ neurological system ❖ penis, scrotum and testes ❖ foot, ankle, knee and hip ❖ hand, wrist, elbow and shoulder ❖ lumbar and cervical spine ❖ skin and appendages • Clean and sterile technique • Scrubbing, gowning and gloving • Wound dressing and bandaging • Leg ulcers • Management of superficial thrombophlebitis and DVTs • Suturing and removal of sutures and staples • Instrument tie • Freezing and cautery • Insertion of tubes, drains, needles • Interpretation of investigations – X-rays, CT scans, MRI scans, ultrasound, Doppler and duplex scans, blood tests, pathology • Management of fluids and electrolytes • Emergency medicine skills – airway maintenance etc. • Patient education – peak flow, spirometry, inhalers, nebulisers, glucose measurement • Prescribing skills • Infection control
Teaching Methodology	The course is delivered by clinical placements and associated lectures. Time is allocated during the week for discussions and self-directed learning.

<table>
<tr><td>Bibliography</td><td>
Required Textbooks/Reading:
<table>
<tr><th>Authors</th><th>Title</th><th>Publisher</th><th>Year</th><th>ISBN</th></tr>
<tr><td>Brunicardi, F. Charles</td><td>Schwartz's principles of surgery (9th ed.)</td><td>McGraw-Hill</td><td>2010</td><td>9780071547703</td></tr>
<tr><td>Raftery, Andrew T.</td><td>Applied basic science for basic surgical training</td><td>Churchill Livingstone Elsevier</td><td>2008</td><td>9780080451404</td></tr>
</table>
Recommended Textbooks/Reading:
<table>
<tr><th>Authors</th><th>Title</th><th>Publisher</th><th>Year</th><th>ISBN</th></tr>
<tr><td>Goldberg, Andrew.</td><td>Surgical talk: lecture notes in undergraduate surgery</td><td>Imperial College Press</td><td>2012</td><td>9781848166141</td></tr>
</table>
</td></tr>
<tr><td>Assessment</td><td>Final year exam and final year OSCE.</td></tr>
<tr><td>Language</td><td>English</td></tr>
</table>