Course Title	**Nephrology, Urology and Transplant Medicine**						
Course Code	**MED-504**						
Course Type	Required						
Level	Undergraduate						
Year / Semester	Year 5/ Semester 9 (Fall)						
Teacher's Name	**Course Leads:** Dr Polycarpos Polycarpou Dr Savvas Omorphos						
ECTS	6	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 four weeks working primarily with patients with renal and urological disorders. They will develop an understanding of the presentation, signs and symptoms, physical examination findings, investigations, diagnosis, treatment (medical and/or surgical, including transplant surgery, as appropriate) and management plan for common renal and urological disorders. The students will learn how to take detailed histories from, carry out systematic clinical examination of, and interpret laboratory and imaging data on patients with disorders of the kidneys and urological system. The students will gain a basic understanding of the application and type of information to be obtained from different methods for investigating kidney and urological disorders. They will also spend time in theatre observing renal, urological and transplant surgery.						
Learning Outcomes	After the completion of the course the students should be able to: 1. Take a history from a patient, or relative of a patient, presenting with a renal or urological disorder, in a sensitive and caring manner 2. Carry out a sensitive physical examination as part of investigation of the presenting complaint 3. Come up with a differential diagnosis for the presenting complaint 4. Identify appropriate investigations, including blood and urine tests, and imaging, to assist in the diagnosis of the presenting complaint and to interpret the results from such tests 5. Prepare a treatment management plan for the patient to present to the responsible clinician to include medical, pharmacological, surgical options as appropriate.						

	6. Observe, and where appropriate carry out or assist with, the following procedures: urine stick testing, microscopy and culture, urethral swabs, catheterization, ultrasound, kidney ureter bladder X-Ray, intravenous urogram, non-contrast CT scan, MRI scan, dialysis, lithotripsy, renal biopsy, cystoscopic, percutaneous and open surgical approaches, transurethral resection of the prostate (TURP), prostatectomy, nephrostomy and other surgical procedures, planned and opportunistic.		
Prerequisites	None	Required	None
Course Content	• Acidosis and alkalosis • Hyponatraemia, Hypernatraemia, Hypokalaemia, Hyperkalaemia • Haematuria • Urinary tract infection • Pyelonephritis • Glomerular disease • Acute renal failure • Chronic renal failure • Renal stones • Renal transplantation • Haemodialysis, peritoneal dialysis • Urinary tract stones • Developmental abnormalities including: Renal Agenesis, Unilateral Kidney, Pelvic Kidney, Horseshoe Kidney, Multiple Ureters, Misplaced ureters, Polycystic Kidneys • Uraemia • Nephrotic syndrome • Polycystic kidney disease • Renal artery stenosis • Diabetic nephropathy • Reflux nephropathy • Renal cell carcinoma • Bladder carcinoma • Testicular tumours • Hydrocele and Varicocele of the testis • Epididymal cysts, Epididymo-orchitis • Penile carcinoma • Benign prostatic hypertrophy • Prostate cancer		

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Chronic urinary retention
Ureteric obstruction

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<tr><td>Teaching Methodology</td><td>The course is delivered by clinical placements, lectures, tutorials, case studies and group discussions.</td></tr>
<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>Field, Michael J.</td><td>The renal system: basic science and clinical conditions</td><td>Churchill Livingstone Elsevier,</td><td>2010</td><td>9780702033711</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>Brenner, Barry M & Rector, Floyd C</td><td>Brenner & Rector's The kidney</td><td>Saunders</td><td>2008</td><td>9781416031055</td></tr>
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<tr><td>Assessment</td><td>Final year exam and final year OSCE.</td></tr>
<tr><td>Language</td><td>English</td></tr>
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