Course Title	**Integrated Clinical Practice V**								
Course Code	**MED-406**								
Course Type	Required								
Level	Undergraduate								
Year/ Semester	Year 4								
Teacher's Name	**Course Lead:** Dr Evis Bagdades **Clinical Attachment Leads:** Dr Evis Bagdades (Junior Medicine) Prof Panos Economou (Junior Surgery) Prof George Samoutis (Primary Care) **Lead for Communication and Clinical Skills**: Dr Evie Vassiliou **Clinical Skills Coordinator/ OSCE Responsible Examiner)** Dr George Kyratzis **Communication Skills Coordinator** Dr Panayiota Andreou **Elective Academic Lead** Dr Annita Achilleos								
ECTS	30	Clinical Lectures / week	4	Laboratories / week	3	Clinical Practice	33	Elective	12
Course Purpose and Objectives	In this fifth and final Integrated Clinical Practice course, students will relate their underlying knowledge in the sciences acquired lectures to clinical practice in hospitals and clinics. The students will be able to apply previous learning in the different disciplines (e.g. pathology, pharmacology) to real patients. They will work closely with tutors at each hospital and will have the opportunity to practise their history taking skills on real patients. They will also have the opportunity to practise their clinical skills and examine the various body systems on real and simulated patients. Furthermore, students will have the opportunity to broaden their experiences in anything that may be relevant to their future career in medicine in the Elective.								

	The MED-406 Integrated Clinical Practice V includes **clinical rotations in Junior Medicine, Junior Surgery and Primary Care, workshops, clinical and communication skills, an elective and clinical lectures.** **By the end of the course students should be able to:** 1. Build on the skills acquired in MED 205, 210, 305 and 310 to improve and expand their communication skills related to history-taking and explaining. 2. Practise these more advanced skills with trained role players. 3. Practise and demonstrate the clinical and communication skills on a variety of patients encountered during the three attachments – Junior Medicine, Junior Surgery and Primary Care 4. Build on their holistic understanding of medicine through further case studies relating to topics encountered during their medical training. 5. Take focused history from patients presenting with a wide range of medical and surgical problems. 6. Perform an examination of patients appropriate to their presenting complaint. 7. Come up with differential diagnoses for the medical and surgical patents based on history, examination and knowledge of the basic and clinical sciences. 8. List possible causes for medical and surgical conditions and establish relevant risk factors for disease in each patient. 9. Select appropriate investigations, interpret the results accurately and design a management plan accordingly – under close supervision. 10. Write clear, accurate medical notes of patients clerked. 11. Describe or perform relevant practical procedures – under supervision. 12. Demonstrate effective communication with patients, relevant and members of the healthcare team. 13. Reflect upon their experiences and develop plans for professional development.
Learning Outcomes	*The following list provides the learning objectives that will be covered in sessions of each week:* ***Clinical Attachments in Junior Medicine, Junior Surgery and Primary Care:*** *Please refer to the* ***Junior Medicine, Junior Surgery and Primary Care Attachment Handbooks*** *on Moodle for the learning objectives that will be covered during the clinical attachments.* ***LOBs covered during Primary Care Attachment Clinical Lectures:*** ***'Managing chronic diseases in Primary Care: a patient centred approach'*** ***(Dr George Samoutis)*** 1. *Outline the Chronic Care model.* 2. *Describe the implementation of the basic principles of the Chronic Care model in primary care.* 3. *Describe key principles of diagnosis/management of metabolic syndrome and respiratory diseases in primary care.* 4. *Elicit the broader social context of patient's problem alongside taking the clinical history.* 5. *Gather a narrative of the patient's illness alongside the clinical history and prioritize their needs/wishes.* 6. *Describe the principles of developing a therapeutic relationship in primary care.*

'CDM: Cardiology in primary care' (Dr Renos Avraam)

7. *Describe the key principles of diagnosis/management of chest pain in primary care.*
8. *Describe the key principles of diagnosis/management of heart failure in primary care.*
9. *Describe the key principles of diagnosis/management of arrythmia in primary care.*

'Women's Health in Primary Care' (Dr Julia Nicolaou)

10. *Outline the key principles of diagnosis/management of pelvic pain in primary care.*
11. *Describe the key principles of diagnosis/management of Contraception and STDs in primary care.*
12. *Describe the key principles of diagnosis/management of early pregnancy and complications in primary care.*

'Paediatrics in primary Care' (Dr Christos Economou)

13. *Describe the key principles of diagnosis/management for high prevalence diseases in Primary Paediatric care.*

LOBs covered during Surgery Attachment Clinical Lectures:

'Paediatric surgical emergencies // common paediatric surgical conditions' (Dr Chrysi Papageorgiou)

14. *List the common causes of the acute abdomen in children.*
15. *Describe the clinical features of children with an acute abdomen.*
16. *Outline the role of investigations and surgery in the acute abdomen.*
17. *Describe the normal course and timing of testicular descent.*
18. *Discuss the problems of having undescended testes.*
19. *Discuss the management of UDT.*
20. *Describe the anatomy of the inguinal canal and types of hernias in children.*
21. *List the common associations of hernia in children.*
22. *Discuss why hernias are managed differently in children than in adults.*
23. *Describe the pathophysiology of intussusception.*
24. *Describe the presentation of intussusception.*
25. *Outline the use of investigations in suspected intussusception.*
26. *Describe the pathophysiology of pyloric stenosis.*
27. *Describe the presentation of pyloric stenosis including biochemical abnormalities.*
28. *Outline the management of pyloric stenosis.*
29. *Describe the pathophysiology of Hirschsprung's.*
30. *Describe the presentation of Hirschsprung's.*
31. *Outline the management of Hirschsprung's.*
32. *Outline the presentation and prognosis of a Wilm's tumour.*
33. *Outline the presentation and prognosis of a Neuroblastoma.*

'Thyroid and Parathyroid disease' (Dr Vassilis Constantinides)

34. *Describe the anatomy of the thyroid gland.*
35. *Outline the pathophysiology of the thyroid gland and be able to interpret thyroid function tests and immunological tests.*
36. *Describe the metabolic effects and consequential results of thyroid pathology.*
37. *Describe the symptoms and signs of a goitre.*
38. *List causes of goitre.*
39. *Explain how you would assess thyroid status in a patient with goitre.*
40. *Describe the anatomy and physiological functions of the parathyroid glands.*
41. *Describe the metabolic effects and consequential results of parathyroid pathology.*

'Stone disease, urinary tract infection, lower urinary tract dysfunction (male and female)' (Dr Savvas Omorphos)

42. *Outline the epidemiology of stone disease.*
43. *Explain the pathophysiology and risk factors.*
44. *List the symptoms and signs characteristic of urinary tract stone disease.*
45. *Give indications for and explain the role of imaging investigations e.g. ultrasound plus KUB x-ray, intravenous urogram and the role of non-contrast CT.*
46. *Explain the emergency nature of an infected obstructed kidney and the use of percutaneous nephrostomy.*
47. *Outline the MDT and management options including observation, lithotripsy, cystoscopic, percutaneous and open surgical approaches.*
48. *List ways that future recurrences may be prevented.*
49. *List the symptoms and signs of a urinary tract infection (UTI).*
50. *Explain how you would investigate and manage a suspected UTI including the importance of urine culture before starting antibiotics.*
51. *Explain the management of a confirmed UTI.*
52. *Outline the importance of excluding treatable causes, e.g. urinary stasis and stones.*
53. *Describe the symptoms and signs of urinary tuberculosis.*
54. *Outline the management of urinary schistosomiasis.*
55. *Describe the concept of the pelvic floor and its role in continence and support.*
56. *Explain the Stress vs urgency vs mixed incontinence.*
57. *Explain the concept of the 'Overactive Bladder'.*
58. *Give a differential diagnosis of urgency (including infection, bladder stones and malignancy).*
59. *Outline the role of investigations including frequency volume chart and urodynamics.*
60. *Outline the role of the MDT.*
61. *Describe the treatment options available, e.g. life style and fluid modification, pelvic floor exercise, pharmacotherapy, surgery.*
62. *Discuss the management of chronic pelvic pain.*
63. *Explain the concept of storage vs voiding symptoms.*
64. *Outline the major causes of bladder outlet obstruction, e.g. benign prostatic enlargement, urethral stricture.*
65. *Explain how these symptoms are investigated including quality of life questionnaire, flow study.*
66. *Outline the medical and surgical management benign prostatic enlargement.*
67. *Describe the management of urinary retention, including indications, contraindications and procedures involved in urethral and suprapubic catherisation.*
68. *Describe the complications of bladder outlet obstruction and urinary retention, e.g. obstructive uropathy and its management.*

'Urological Emergencies' (Dr Savvas Omorphos)

'Cancer of the bowel, colonic polyps, intestinal obstruction' (Dr Petros Myriantheas)

69. *Describe the symptoms and signs of colonic polyps and carcinoma.*
70. *Give a differential diagnosis for a patient with rectal bleeding.*
71. *Give a differential diagnosis for a patient with constipation.*
72. *Give the genetic and environmental factors that predispose to colonic neoplasms.*
73. *Describe the pathogenesis of colorectal adenomas and the adenomacarcinoma sequence.*

74. *Compare the genetics of familial adenomatous polyposis, hereditary non-polyposis colorectal cancer and sporadic colorectal cancer.*
75. *Describe screening and management strategies for patients and families with familial colon cancer syndromes.*
76. *List the methods available for population screening for colorectal polyps and cancer.*
77. *Discuss the advantages and disadvantages of population screening with respect to acceptability, safety, sensitivity, specificity, cost effectiveness, practicality and effectiveness.*
78. *Give symptoms and signs of anal cancer.*
79. *Describe the pathology and metastasis of anal carcinoma.*

'Jaundice, gall stones, pancreatic pathology'(Dr Panayiotis Hadjicostas)

80. *Describe the enterohepatic circulation.*
81. *Describe the metabolism of haemoglobin after red cell breakdown and explain how bilirubin is excreted.*
82. *Explain how disruption of bilirubin metabolism and excretion can cause jaundice.*
83. *Describe the pathogenesis of conjugated and unconjugated hyperbilirubinaemia and list conditions associated with each.*
84. *Describe the symptoms and signs in a patient presenting with jaundice.*
85. *Explain how features of the history and examination can be used to distinguish between haemolytic, hepatocellular or cholestatic jaundice.*
86. *Explain the relevance of changes in colour and bilirubin and urobilinogen content of stools and urine in the assessment of jaundice.*
87. *Outline the mechanisms whereby drugs may cause jaundice and give examples of drugs which have each effect.*
88. *Describe the symptoms of biliary colic.*
89. *Describe the pathogenesis of gallstone formation.*
90. *List the risk factors for developing gallstones.*
91. *Describe the anatomy of the pancreas and the pancreatic duct.*
92. *Describe the endocrine and exocrine functions of the pancreas.*
93. *Describe the symptoms and signs of acute pancreatitis.*
94. *Give a differential diagnosis for severe abdominal pain.*
95. *List the causes of acute pancreatitis.*
96. *Describe the pathophysiology of acute pancreatitis.*
97. *Describe the symptoms and signs of a patient with chronic pancreatitis.*
98. *Describe the pathogenesis of chronic pancreatitis.*
99. *List the causes of chronic pancreatitis.*
100. *Describe the physiological basis behind pancreatic function tests such as the secretin stimulation test and comment on their diagnostic value.*
101. *Describe the symptoms and signs of pancreatic cancer.*
102. *Describe the pathology/pathogenesis of pancreatic cancer.*
103. *List the risk factors for pancreatic cancer.*
104. *Describe the natural history and prognosis of pancreatic cancer.*

'Burns, dermatological malignancies, melanoma' (Dr Nicos Mantas)

105. *Describe the normal anatomy and function of the skin.*
106. *Describe the role of the skin in defence against infection.*
107. *Give risk factors for dermatological infection.*
108. *List bacterial organisms that commonly cause skin infection and describe clinical features associated with each.*
109. *Compare and contrast the presentation of venous and arterial leg ulcers.*

110. *Describe the pathogenesis of venous and arterial ulceration.*
111. *Give a differential diagnosis for leg ulcers.*
112. *Describe the features of decubitus ulcers (pressure sores).*
113. *Describe risk factors for decubitus ulcers.*
114. *Describe the adverse effects of sun on the skin.*
115. *Explain to a patient how to reduce sun exposure.*
116. *Describe the clinical features of benign skin lesions including seborrhoeic wart, epidermoid cyst and of lipoma.*
117. *Compare and contrast the clinical features of basal cell carcinoma (rodent ulcer) and squamous carcinoma.*
118. *Describe the main features of a melanocytic naevus (mole).*
119. *Describe the clinical features of malignant melanoma.*
120. *Describe the pathology and pathogenesis of malignant melanoma.*
121. *Discuss the treatment options for melanoma and the factors which determine prognosis.*
122. *Describe the clinical features of Kaposi's sarcoma (KS).*
123. *Describe which groups of patients are at risk of KS.*
124. *List causes of burns.*
125. *Describe the pathophysiology of burns.*
126. *Describe the classification of burns by thickness of burn.*
127. *Explain how burns can affect tissues and organs other than the skin.*
128. *Describe the use of the rule of nines in the assessment of a patient with burns.*
129. *Describe the immediate first aid steps in the management of a patient with burns.*
130. *Explain which patients with burns need in-patient management.*

'Maxillofacial and plastic surgery topics' (Dr Spyros Papacharalambous)

131. *Describe the phases of wound healing (surgical wounds, traumatic wounds, ulcers).*
132. *Explain the role of fibroblasts in wound healing.*
133. *Describe three elements contributing to wound healing.*
134. *Describe the histological and biochemical events in wound healing.*
135. *Explain wound strength.*
136. *Describe the difference between a skin graft and a skin flap.*
137. *Identify the different types of skin grafts, their main uses and donor sites.*
138. *List type of wounds.*
139. *Describe their mode of healing (surgical wounds, traumatic wounds, ulcers).*
140. *Give examples of healing by 1st and 2nd intention.*
141. *Explain advantages and disadvantages of healing by second intention.*
142. *Describe wound healing in different types of tissue, skin, bone, fascia, gut (suturing of skin wounds, abdominal closure, intestinal, vascular and urological anastomosis, bone fixations).*
143. *Describe healing in bone and how it differs from healing in other tissues.*
144. *Describe factors affecting bone healing.*
145. *Explain aberrant healing in bone (non-union, mal-union, mal-alignment).*
146. *Describe the process of healing in tendons, cartilage and nerves.*
147. *Describe factors affecting wound healing (wound infection, nutrition, malignancy, foreign body).*
148. *Explain causes of wound infection.*
149. *Describe four categories of wounds (clean, contaminated etc).*
150. *List common organisms causing wound infections.*

151. *Describe methods of preventing wound infection.*
152. *Describe wound failure and aberrant healing (contractures, hypertrophic scars, keloids, wound dehiscence).*
153. *List adverse effects of scarring.*
154. *List types of wound dressings (wound dressing used for different types of wounds in hospital and by district nurses).*
155. *Describe the reasons for using dressing.*
156. *Describe how different dressing affect wound healing (bandaging leg ulcers, cavity dressing).*

'Hernias (including hiatus hernia and reflux)' (Dr Yiannis Ioannou)

157. *Describe the anatomy of the peritoneum and the abdominal wall.*
158. *Describe the symptoms of inguinal and femoral hernias.*
159. *Explain how you would examine a patient to demonstrate inguinal or femoral hernias.*
160. *Describe the pathogenesis and anatomy of direct and indirect inguinal and femoral hernias.*
161. *Describe the pathogenesis of incisional hernias and list predisposing factors.*

'Limb and mesenteric ischaemia, infarction, ulceration, gangrene' (Dr Niki Krashia)

162. *Describe the symptoms and signs of chronic limb ischaemia.*
163. *Describe the symptoms and signs of acute limb ischaemia.*
164. *Outline the mechanisms by which it can develop.*
165. *List the causes of chronic leg ulcers and describe the different appearances.*
166. *List the different types of gangrene, wet, dry, gas, Fournier's and describe the pathogenesis and appearance of each and outline its management.*
167. *Describe the gangrene associated with chronic ischaemia.*
168. *Describe how skin ulceration can be prevented.*

'Fissure in ano, haemorrhoids, anorectal sepsis and fistula in ano' (Dr Savvas Hirides)

169. *Describe the anatomy of the anal canal and sphincters.*
170. *Describe the physiology of continence and defaecation.*
171. *Describe the symptoms and signs of haemorrhoids.*
172. *Give risk factors for haemorrhoids.*
173. *Give a classification for haemorrhoids.*
174. *Describe the symptoms and signs of anorectal fistulae and abscesses.*
175. *List causes of anorectal fistulae and abscesses.*
176. *Describe the pathogenesis of anorectal abscesses and fistulae and outline with the classification of these.*

'Principles of Surgery Part 1'(Prof Panos Economou)

177. *Use history taking, examination, signs and symptoms, basic knowledge, the basic principles of surgery and deductive processes to diagnose disease and decide on treatment of common surgical conditions like: infections, abscesses, intracranial haemorrhage, benign and malignant tumours, thyroid disease, inflammatory bowel disease, pancreatitis, appendicitis, gall stones, peptic ulceration, ischaemic bowel, complications of surgery, compartment syndrome, varicose veins, limb ischaemia, breast disease, hernias, paediatric surgical conditions, skin malignancy and shock.*

'Principles of Surgery Part 2' (Prof Panos Economou)

178. *Use history taking, examination, signs and symptoms, basic knowledge, the basic principles of surgery and deductive processes to diagnose disease and decide on treatment of common surgical conditions like: infections, abscesses, intracranial haemorrhage, benign and malignant tumours, thyroid disease, inflammatory bowel disease, pancreatitis, appendicitis, gall stones, peptic ulceration, ischaemic bowel, complications of surgery, compartment syndrome, varicose veins, limb ischaemia, breast disease, hernias, paediatric surgical conditions, skin malignancy and shock.*

'Breast Cancer / Breast Cancer Screening / Benign Disease and breast abscess / infection' (Dr Marios Pedonomou)

179. *Outline the epidemiology of breast cancer.*
180. *Describe the symptoms and signs of breast cancer.*
181. *Describe the process of triple assessment of breast lumps.*
182. *Describe the pathology of breast cancer and describe the TNM classification.*
183. *List the risk factors for and protective factors against breast cancer.*
184. *Describe the risk factors for breast cancer.*
185. *Describe the natural history and prognosis of breast cancer.*
186. *Discuss the aetiology and management of mastalgia (breast pain).*
187. *Describe the Benign breast diseases (ANDI), their distinguishing features, differential diagnosis and management.*

'Acute Abdomen and Gastrointestinal bleeding' (Dr Marios Pedonomou)

188. *Explain what is meant by 'acute abdomen'.*
189. *Discuss the causes of an acute abdomen.*
190. *Outline the principles of management of an acute abdomen.*
191. *Describe the key features of peritonitis.*
192. *Describe the symptoms and signs of an acute GI bleed.*
193. *List aspects of the history and examination that are useful for the assessment of severity of a GI bleed.*
194. *Explain the significance of tachycardia, postural hypotension and shock in the estimation of loss of circulating blood volume.*
195. *Describe how you would distinguish between upper and lower GI bleeding by history and examination.*
196. *Explain what is meant by occult GI bleeding.*
197. *Describe the primary and secondary preventative measures for upper GI bleeding in patients at risk of or with a history of peptic ulcer.*
198. *Describe how you would distinguish between upper and lower GI bleeding by history and examination.*
199. *Explain what is meant by occult GI bleeding.*
200. *Describe the primary and secondary preventative measures for upper GI bleeding in patients at risk of or with a history of peptic ulcer.*

'Pediatric orthopedics common problems I & II' (Junior Surgery - Dr Panos Hadjicostas)

'The principles of fracture management I & II' (Junior Surgery - Dr Panos Hadjicostas)

'Sport Injuries of the knee'(Junior Surgery - Dr Panos Hadjcostas)

'The principles of trauma management I & II' (Junior Surgery - Dr Chrysanthos Georgiou)

LOBs covered during Medicine Attachment Clinical Lectures:

'Cardiac: Situs Inversus, Normal Position, Cardiac Failure' (Dr Chrysa Tziakouri)

201. *Describe heart, aorta and pulmonary vessel anatomy on CXR.*
202. *Heart failure- Define and list CXR appearances.*
203. *Distinguish interstitial oedema, air space oedema and pleural effusion on CXR.*
204. *Describe cardiac imaging techniques- plain film, USS (Echo), CT (coronary angiogram), NM (MPS) MR (functional).*
205. *Provide the definition, classification and associations of situs.*

'Strokes and Head Injury' (Dr Chrysa Tziakouri)

'Fractures and Healing, Skeletal Abnormalities' (Dr Chrysa Tziakouri)

'Parkinson's disease'(Prof Savvas Papacostas)

206. *Describe the symptoms and signs of Parkinson's disease and Parkinsonism.*
207. *List causes of Parkinson's disease and Parkinsonism.*

'Dementia'(Prof Savvas Papacostas)

208. *Describe the symptoms and signs of dementia.*
209. *Describe the assessment of a patient with suspected dementia.*

'Hypertension' (Dr Evagoras Economides)

210. *Define hypertension and give British Hypertension Society targets for blood pressure control.*
211. *Describe the causes and effects, symptoms and signs of hypertension.*
212. *List causes of hypertension including the primary renal causes and give symptoms and signs that may be found in each condition.*
213. *Describe investigations that should be performed to a) look for causes of hypertension b) look for complications of hypertension.*
214. *Describe the pathological effects of hypertension and the consequences of untreated hypertension including end organ damage and the changes of accelerated hypertension.*
215. *Identify appropriate investigations in a hypertensive patient and interpret the results including the ECG changes of LVH.*
216. *Describe people who have higher risk of developing hypertension e.g. ethnic groups, those with family history etc.*
217. *Discuss the effect that dietary salt has on the population's blood pressure and how this might be improved.*
218. *List associated cardiovascular risk factors that should be looked for in patients with hypertension.*
219. *Explain the long-term effects of high blood pressure to a patient; counsel them on the importance of lowering blood pressure and lifestyle changes.*

220. *Discuss the non-pharmacological management of cardiovascular risk.*
221. *List the classes of drugs that can be used to control blood pressure and describe the mechanism of action, place in therapy and major side effects of each.*
222. *Define accelerated hypertension and describe the pathology of target organ damage caused by accelerated hypertension.*

'Acute coronary syndrome/ Myocardial infarction (MI)' (Dr Evagoras Economides)

223. *Describe symptoms and signs of an acute myocardial infarction.*
224. *Give criteria for diagnosis of myocardial infarction.*
225. *Describe the immediate management of a patient with myocardial infarction.*
226. *Describe the mechanism of action, role in therapy and major side effects of aspirin, diamorphine and oxygen in acute MI.*
227. *Describe symptoms and signs of unstable angina.*
228. *Explain how an ECG can be used to determine the site of myocardial infarction and indicate which vessel is occluded.*
229. *Distinguish the alterations from normal in an ECG of a patient with a myocardial infarction.*
230. *Discuss the management of a patient in primary care after a myocardial infarction.*
231. *Explain the origins of the normal ECG including the morphology of the waves. Calculate the electrical axis of the heart.*
232. *Explain the origin of the P, QRS and T waves on the ECG.*
233. *Identify common abnormal ECG's tracings.*
234. *Identify a normal ECG trace and calculate the rate.*

'Hyperlipidaemia' (Dr Evagoras Economides)

235. *Explain how you would decide which patients should have lipid lowering therapy.*
236. *List other cardiovascular risk factors that should be reviewed in a patient presenting with hyperlipidaemia and describe the management of these.*
237. *Explain what is measured when thyroid function tests are requested and explain the significance of each parameter.*

'Asthma' (Dr Despina Mavridou)

238. *Describe symptoms and signs of poorly controlled asthma.*
239. *Describe investigations that can be used to confirm the diagnosis of asthma.*
240. *Describe the mechanism of action, place in therapy and major side effects of asthma treatments including short and long acting beta 2 agonists, corticosteroids and leukotriene antagonists.*
241. *Explain the rationale behind the stepwise approach to asthma management.*
242. *Describe the difference between a reliever and preventer inhaler and the use of each in asthma management.*
243. *Demonstrate the use of a peak flow meter and chart to a patient.*
244. *Be able to interpret spirometry.*
245. *Explain to a patient how to reduce exposure to allergens including house dust and house dust mite.*
246. *List precipitating factors, including drugs, for an asthma attack.*
247. *Explain how clinical features can be used to determine the severity of an acute asthma attack.*
248. *Describe the emergency management of asthma in a person presenting to accident and emergency.*
249. *Describe how a patient with acute asthma should be monitored following admission to hospital.*

250. *Describe measures that should be taken prior to hospital discharge to prevent asthma recurrence.*
251. *Describe ways in which patients can be encouraged to take their asthma medication e.g. simplification of treatment regimes, education and self-management plans.*

'COPD'(Dr Despina Mavridou)

252. *List symptoms experienced by people with COPD.*
253. *Describe the clinical signs found in people with COPD.*
254. *Describe the pathophysiology of COPD.*
255. *List causes of COPD.*
256. *Quantify smoking in terms of "pack years".*
257. *Describe the role of spirometry in diagnosing and determining the severity of COPD.*
258. *Describe the purpose and expected findings of other investigations including chest X-ray, full blood count and arterial blood gases in a patient with COPD.*
259. *List drugs that can be used to aid smoking cessation and give evidence for their effectiveness.*
260. *Give smoking cessation advice to a patient.*
261. *Explain the role, mechanism of action and major side effects of bronchodilators, corticosteroids, theophylline in the management of COPD.*
262. *List complications of COPD and describe their investigation and management.*
263. *Describe the assessment and emergency management of a patient presenting with acute exacerbation of COPD.*
264. *Explain how you would determine what concentration of oxygen to administer to a patient with COPD.*
265. *List organisms that may cause pulmonary infection in patients with COPD.*
266. *Explain what is meant by cor pulmonale.*
267. *Explain the diagnosis of COPD to a patient and discuss the treatment options including the cessation of smoking.*

'Diabetes mellitus management and complications (acute and chronic)' (Dr Stelia Kadis)

268. *Describe the ketoacidosis.*
269. *List factors that may trigger diabetic ketoacidosis in a patient.*
270. *Describe how you would make the diagnosis of diabetic ketoacidosis.*
271. *Describe the emergency management of a patient with diabetic ketoacidosis.*
272. *Describe the pathophysiology symptoms and signs of non-ketotic coma and describe how you would make the diagnosis of non-ketotic coma.*
273. *Describe the clinical consequences of macrovascular disease in diabetic patients.*
274. *Discuss the primary and secondary prevention of macrovascular disease in patients with diabetes.*
275. *List organs and tissues affected by microvascular disease and describe the clinical features in each.*
276. *Discuss the primary and secondary prevention of microvascular disease in patients with diabetes.*
277. *List classes of oral hypoglycaemic agents (with examples) and describe the mechanisms of action, place in therapy and major side effects of each.*
278. *Give indications for insulin treatment.*
279. *Describe devices available for insulin administration.*
280. *Describe symptoms and signs of hypoglycaemia.*

281. *List common causes of hypoglycaemia.*
282. *Explain how to recognise and prevent severe hypoglycaemia.*
283. *Describe the emergency management of hypoglycaemia.*
284. *pathophysiology symptoms and signs of diabetic ketoacidosis.*
285. *List factors that may trigger diabetic ketoacidosis in a patient.*
286. *Describe how you would make the diagnosis of diabetic ketoacidosis.*
287. *Describe the emergency management of a patient with diabetic ketoacidosis.*
288. *Describe the pathophysiology symptoms and signs of non-ketotic coma and describe how you would make the diagnosis of non-ketotic coma.*
289. *Describe the clinical consequences of macrovascular disease in diabetic patients.*
290. *Discuss the primary and secondary prevention of macrovascular disease in patients with diabetes.*
291. *List organs and tissues affected by microvascular disease and describe the clinical features in each.*
292. *Discuss the primary and secondary prevention of microvascular disease in patients with diabetes.*
293. *List classes of oral hypoglycaemic agents (with examples) and describe the mechanisms of action, place in therapy and major side effects of each.*
294. *Give indications for insulin treatment.*
295. *Describe devices available for insulin administration.*
296. *Describe symptoms and signs of hypoglycaemia.*
297. *List common causes of hypoglycaemia.*
298. *Explain how to recognise and prevent severe hypoglycaemia.*
299. *Describe the emergency management of hypoglycaemia.*

'Management of diabetes mellitus and obesity' (Dr Stelia Kadis)

300. Discuss the multidisciplinary management of diabetes mellitus including pharmacological interventions.
301. Discuss the multidisciplinary management of obesity including pharmacological interventions.

'Thyroid and Parathyroid disease' (Dr Stelia Kadis)

302. *Describe symptoms and signs of hyperthyroidism.*
303. *Describe the investigation of a hyperthyroid or hypothyroid patient.*
304. *Describe symptoms and signs of hypothyroidism.*
305. *Give a differential diagnosis for the commoner causes of weight gain.*
306. *List common causes of hypothyroidism and hyperthyroidism.*
307. *Describe the effect of hyper and hypoparathyroidism on calcium metabolism.*

'Urinary tract Infections'(Prof Efthyvoulos Anastassiades)

308. *Explain how you would investigate and manage a suspected UTI.*

'Acute and Chronic renal failures' (Prof Efthyvoulos Anastassiades)

309. *Describe symptoms and signs of uraemia.*
310. *Give a differential diagnosis for conditions causing acute renal failure, and classify as prerenal, renal and postrenal.*
311. *Describe the major metabolic disturbances in acute renal failure.*
312. *List risk factors for acute renal failure.*
313. *Describe the investigation and basic management of acute renal failure.*
314. *Describe symptoms and signs of chronic renal failure.*

315. *Describe the physiological abnormalities and common causes of chronic renal failure.*
316. *Describe symptoms and signs of autosomal dominant polycystic kidney disease.*

'Cerebrovascular disease'(Dr Kyriakos Kyriallis)

317. *Define stroke and transient ischaemic attack and explain the difference between them.*
318. *List the major mechanisms underlying stroke and give risk factors for each.*
319. *Describe the features of an upper motor neuron lesion.*
320. *Describe clinical features seen in stroke and how they differ according to the artery and area of brain affected.*
321. *Describe the investigations and expected findings in the diagnosis of stroke.*

'Blackouts /Loss of consciousness: Differential Diagnosis and Clinical approach (Dr Kyriakos Kyriallis)

'Osteoarthritis and Rheumatoid Arthritis' (Dr Elpida Mina)

322. *Discuss the main signs, symptoms and pattern of joint involvement in osteoarthritis.*
323. *Briefly describe the symptoms, examination findings and investigation of rheumatoid arthritis (RA).*

'Auto-immune disorders' (Dr Elpida Mina)

324. *Discuss the epidemiology and aetiology of SLE.*
325. *List organs and tissues that may be affected by SLE, and describe the symptoms and signs caused by SLE at each site.*
326. *List investigations that should be performed to support a diagnosis of SLE.*
327. *Describe the clinical features associated with antiphospholipid antibodies.*
328. *Describe the symptoms and signs of Raynaud's phenomenon.*
329. *Describe the symptoms and signs of septic arthritis and osteomyelitis.*
330. *Describe the symptoms and signs of acute and chronic gout.*
331. *Describe the clinical features of PMR and GCA.*
332. *Give the differential diagnosis of a raised ESR in the elderly.*
333. *Discuss the investigation of a patient with suspected PMR and GCA, including the advantages and limitations of performing a temporal artery biopsy for the diagnosis of GCA.*
334. *Outline the basic management of PMR/GCA.*
335. *Describe a rationale for the investigation of back pain.*

'Inflammatory bowel disease'(Prof Marios Panos)

336. *Describe extra-intestinal manifestations of IBD.*
337. *Give a differential diagnosis for bloody diarrhoea.*
338. *Describe the pathology of UC and Crohn's disease.*
339. *Describe the investigation of IBD and briefly describe the role of medical and surgical management of inflammatory bowel disease.*
340. *List complications of UC and Crohn's disease.*

341. *Describe the association between cancer and inflammatory bowel disease and discuss the indications for colonoscopic surveillance.*
342. *List organisms that cause infectious diarrhoea.*

'Gastrointestinal Bleeding and Assessment of nutritional status and daily requirements' (Prof Marios Panos)

343. *Describe the emergency resuscitation of a patient presenting with a GI bleed.*
344. *Describe the symptoms and signs of an acute GI bleed.*
345. *List aspects of the history and examination that are useful for the assessment of severity of a GI bleed.*
346. *Explain the significance of tachycardia, postural hypotension and shock in the estimation of loss of circulating blood volume.*
347. *Describe how you would distinguish between upper and lower GI bleeding by history and examination.*
348. *Explain what is meant by occult GI bleeding.*
349. *Describe the primary and secondary preventative measures for upper GI bleeding in patients at risk of or with a history of peptic ulcer.*
350. *Be able to calculate body mass index and relate the result to the normal range.*
351. *Describe the complications of obesity.*
352. *Describe different methods for enteral feeding, including naso-gastric, naso-jejunal, gastrostomy and jejunostomy.*

'Pneumonia'(Dr Evis Bagdades)

353. *Describe symptoms and signs of pneumonia.*
354. *Describe the pathophysiology of pneumonia.*
355. *List factors that predispose people to pulmonary infection.*
356. *Name the principal organisms that cause pneumonia in a) immunocompetent people b) immunocompromised people c) people in hospitals/institutions.*
357. *Name the principal organisms that cause "atypical" lower respiratory tract infections.*
358. *Describe the clinical features that suggest an atypical organism is responsible for lower respiratory tract infections.*
359. *Describe the investigation of pneumonia.*
360. *Name antibiotics likely to be effective against each of the major respiratory pathogens.*
361. *Describe the indications for vaccination against a) influenza, b) pneumococcus, c) mycobacterium tuberculosis.*
362. *Describe the role of the physiotherapist in the management of pneumonia.*
363. *Describe clinical features and management of mild, moderate and severe pneumonia.*
364. *Describe the social factors influencing antibiotic prescribing in primary care.*

'Infection control and prevention practices in healthcare settings' (Dr Danny Alon-Ellenbogen)

365. *Be aware that homeostatic mechanisms become less efficient with ageing, resulting in reduced functional reserves at times of stress*
366. *Be aware that disease presentation in older people may be atypical*
367. *Describe the five most common modes of presentation (the geriatric giants)*

368. *Explain the principal causes of falls*
369. *Describe the consequences of falls, including those of prolonged periods unable to rise from the floor.*
370. *Describe the assessment and investigation of a patient with falls to establish the cause*
371. *Describe the symptoms and signs of delirium*
372. *Explain the common causes of delirium*
373. *Outline the investigation of an elderly person with delirium*

'Acute bacterial meningitis' (Dr Danny Alon-Ellenbogen)

1. *Describe the current epidemiology of bacterial meningitis; how was it influenced by vaccines?*
2. *Explain the different mechanisms of CNS infection and its relation to specific pathogens.*
3. *Summarize, step by step, the approach to suspected acute bacterial meningitis, including the indications to perform a CT scan prior to a lumbar puncture.*
4. *Appraise the characteristic CSF findings compatible with bacterial meningitis.*
5. *Plan and select the appropriate antimicrobial management according to the different pathogens and review the prognostic factors involved.*

'Aseptic meningitis and Encephalitis' (Dr Danny Alon-Ellenbogen)

1. *Compare the clinical presentation of aseptic meningitis with that of acute bacterial meningitis while assessing the likelihood of encephalitis.l*
2. *List some of the common aetiologies of aseptic meningitis and encephalitis - viral, bacterial, fungal, parasitic, drug related and autoimmune.*
3. *Contrast the CSF findings of acute bacterial meningitis with those of aseptic and tuberculous meningitis.*
4. *Explain the different modalities used in the diagnosis and evaluation of patients with suspected meningoencephalitis.*

LOBs covered during workshops:

Workshop on Coronary Artery Disease (Dr Joseph Moutiris)

1. *Define Coronary Artery Disease (CAD).*
2. *Discuss the risk factors for developing CAD.*
3. *Take a focused cardiovascular history.*
4. *Perform a cardiovascular examination.*
5. *Offer differential diagnosis.*
6. *Suggest relevant investigations for diagnosing CAD.*
7. *Discuss the management of a patient with CAD in primary care.*
8. *Discuss primary and secondary prevention of cardiovascular diseases.*

Workshop on Arrhythmias including Atrial Fibrillation (Dr Joseph Moutiris)

1. *Define the term arrhythmia and its presentation in primary care.*
2. *Recognize Atrial Fibrillation in primary setting.*
3. *Take a history and perform a clinical examination in a patient with arrhythmia.*
4. *Discuss the differential diagnosis of a patient in primary care with heart palpitations.*
5. *Discuss the basic management of Atrial Fibrillation in primary care.*

LOBs covered during the clinical skills session:

'ECG Technical'

1. *Practise the setup of a 12 lead ECG on a colleague.*
2. *Check that it is technically correct and ready for interpretation.*

'Suturing'

1. *Become familiar with the processes of suturing and perform suturing on a mannequin.*
2. *Revise the principles of sterility and aseptic technique.*

'Eye Examination'

1. *Perform ophthalmoscopy / fundoscopy on a model and on colleagues in a safe and competent manner.*
2. *Know how to describe normal fundus of the eye in a systematic way.*
3. *Revise cranial nerves 2,3,4,6.*

'Scrubbing and gloving'

1. *The aim of this session is to familiarise you with some of the procedures, activities and equipment you will come across during your surgical attachment and to equip you to work safely in the clinical environment of the operating theatre. This will include pre- and post-operative assessment, scrubbing, gowning and gloving.*

'Ear Examination'

1. *Demonstrate competent handling of an otoscope and otoscopy technique.*
2. *Describe the anatomy of the outer and middle ear, identifying structures that can be seen using the otoscope.*
3. *Perform whispered voice and tuning fork hearing tests on a colleague.*

LOBs covered during the communications skill's sessions:

'Communicating with interpreters'

1. *Describe the challenges of working with interpreters.*
2. *Identify and practise skills needed to work effectively with interpreters.*

'Health Behaviour Change I'

1. *To understand the principles of motivational interviewing and the link with health behavior change.*
2. *To demonstrate an ability to implement effective communication skills when discussing health behavior change.*

'Health Behaviour Change II'

1. *To revise the principles of motivational interviewing and the link with health behavior change.*
2. *To demonstrate an ability to implement effective communication skills when discussing health behavior change.*
3. *To practice and/or observe discussing behaviour change within shared decision-making framework.*

'Communicating with children'

1. *Describe the challenges when interviewing children.*

	2. *Identify effective communication skills when interviewing children during medical consultations.* ***'Interviewing Adolescents'*** 1. *Describe the challenges when interviewing adolescents.* 2. *Identify and practice GC skills of information gathering and information giving when interviewing adolescents during medical consultations.* '***Sensitive Topics and breaking confidentiality'*** 1. *Describe the principles and elements of breaking confidentiality.* 2. *Practice and/or observe appropriate interviewing skills for information gathering, information giving and breaking confidentiality.* ***'Sharing Bad News'*** 1. *Describe the principles of sharing bad news.* 2. *Identify the appropriate skills to use when sharing bad news.* 3. *Practice and/or observe sharing bad news with simulated patients in a safe environment.* ***'Depression and Suicidality'*** 1. *To be able to use the appropriate skills for taking a history of a patient with depression and suicidal thoughts.* 2. *To become familiar with the route of referrals.* 3. *To practice communicating their decisions (information giving) in relation to referrals to the patient.* ***'Communicating Risk'*** 1. *Become familiar with recent literature in relation to means for communicating risk.* 2. *Identify the appropriate skills in communicating risk.* 3. *Practice/Observe appropriate skills when communicating risk information.* ***LOBs covered during the elective block:*** *On completion of the course students are expected to be able to:* 1. *Understand the role of the multi-professional health care teams in different clinical settings.* 2. *Reflect on their experiences when working with multi-professional healthcare teams on different clinical settings.* 3. *Develop plans for future professional development.*		
Prerequisites		*Required*	None
Course Content	**Topics covered in Clinical Skills Sessions:** 1: ECG technical 2: Suturing 3: Eye examination 4: Scrubbing and gloving 5: Ear examination		

	Topics covered in Communication Skills sessions: 1: Communicating with Interpreters / **SPs – 2 role plays** 2: Health Behaviour Change I 3: Health Behaviour Change II / **SPs – 2 role plays** 4: Communicating with children 5: Interviewing Adolescents / **SPs** 6: Sensitive Topics and breaking confidentiality / **SPs** 7: Sharing Bad News / **SPs** 8: Depression and suicidality / **SPs** 9: Communicating Risk **Topics covered in Clinical Workshops:** • Coronary Artery Disease • Arrhythmias **Elective Block** The purpose of the Year 4 Elective Block is for students to gain experience in a speciality of interest that is their own choice. The elective must be related to medicine and can be in a clinical environment, laboratory or research-based. Students may use their Elective Block to explore potential career paths. The Elective Block will provide students with the opportunity to broaden their experiences in anything that maybe relevant to their future career in medicine. Students can choose any activity or medical speciality already covered in the curriculum. However, they are encouraged to broaden their experiences and should undertake their elective in a different environment and at greater depth to that already experienced. The elective is seen as an "extension activity". Students are required to complete their Elective Block in Cyprus. The Elective Block period is a four-week block and students will be allowed to undertake their Elective Clinical Attachment in the field/discipline/specialty of their choice, provided the elective is approved by the Elective Block Academic Lead.
Teaching Methodology	The course is delivered by clinical rotations in hospitals, workshops, clinical skills, communication skills and clinical lectures. For the Elective, students will have supervised attendance at a clinical placement or research facility that will be chosen by the student.

<table>
<tr><td>Bibliography</td><td>Recommended Textbooks/Reading:
<table>
<tr><th>Authors</th><th>Title</th><th>Publisher</th><th>Year</th><th>ISBN</th></tr>
<tr><td>Silverman J, Kurtz S, Draper J.</td><td>Skills for communicating with patients</td><td>CRC Press
3rd Edition</td><td>2013</td><td>9781846193651</td></tr>
<tr><td colspan="5">E-book-Permalink:
https://ebookcentral.proquest.com/lib/nicosia/detail.action?docID=4742673</td></tr>
<tr><td>J. Alastair Innes (ed.)</td><td>Macleod's clinical examination</td><td>Elsevier
14th Edition</td><td>2018</td><td>9780702069932</td></tr>
<tr><td>Khan, H et al.</td><td>OSCEs for Medical Finals</td><td>Blackwell, Oxford</td><td>2013</td><td>9780470659410</td></tr>
<tr><td>Talley and O’Connor</td><td>Talley and O’Connor clinical examination: a systematic guide to physical diagnosis</td><td>Elsevier
9th Edition</td><td>2021</td><td>9780729544245</td></tr>
</table></td></tr>
<tr><td>Assessment</td><td>OSCE (Objective Structured Clinical Examination) at the end of Semester 8 and Doctor as a Professional Domain (continuous for Semester 7 and Semester 8).</td></tr>
<tr><td>Language</td><td>English</td></tr>
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