Course title	Clinical Praction	ce: General Surgery					
Course code	MD-601						
Course type	Required						
Level	Undergraduate	е					
Year / Semester	Year 6/ Semes	ter 11/12 (rotation)					
Course Lead	Professor Jose	ph Joseph					
	Chair, Clinical I	Chair, Clinical Education					
		1	Teaching Periods per Wee	k			
ECTS	48	Large Group Learning	Small Group Learning	Clinical Practice			
		3	1	36			
Course purpose and objectives	practise their of to learn about psychosocial a In this course, any sub-special and symptoms (medical and symptoms (medical and symptoms) (medical and symptoms) (medical and symptoms) (medical and symptoms) of follow their pawill take part in physiotherapis professional in professional un (clerking), carrifindings with a ward rounds, to present their pagreed templates. To gain expected to be a professional aim. To gain expected to be a professional aim.	the management of patiend caring perspective. students will work with palty of surgery. They will do pay the profice of patient of the formal wards and management of their time on wards, in the trients throughout their transport of the intension of the patient care — in the patient care — in the patient care in the patient care in the patient care in the patient care in the patient of the patient to the rest of the patients to the rest of the patient care in the patients to the rest of the patient care in the patients to the rest of the patient care in the proficient in diagnosis are proficient in diagnosis ar		kills on real patients, and apeutic, surgical, a surgical problem across of the presentation, signs mosis, treatment conditions. Clerk patients. They will linics. They will try to e continuity of care. They rs, nurses, where any healthcare roles each healthcare will take histories and interpret the at. They will take part in hology meetings and will rate records (using an ement plans. To develop			

- 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 anaesthetics and airway management during their time in theatre.
 - To prepare students to be able to prescribe drugs safely upon completion of their course.
 - To ensure students are able to write prescriptions and fill out drug charts accurately.
- To ensure students are able to inject drugs, at the correct dose, intramuscularly, subcutaneously and intravenously.
- To develop clinical reasoning and problem-solving skills at the bedside, in outpatients and in theatre.
- To develop high standards of professional behaviour.
- To continually reinforce basic and clinical science principles learnt during the earlier part of the course.

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. Discuss a differential diagnosis for the presenting complaint.
- 4. Apply their knowledge of basic and clinical science to identify and explain appropriate investigations, including blood, urine and faecal tests and imaging, cytology and biopsy to assist in the diagnosis of the presenting complaint and to interpret the results from such tests.
- 5. Prepare and explain a surgical treatment management plan for the patient to present to the responsible surgeon.

Learning outcomes

- 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. Prescribe drugs safely

	a. Demonstrate how to write a prescription for a patient, including effective prescription of controlled drugs.						
	b. Demonstrate the correct use of an in-patient prescription chart.						
	c. Inject drugs, at the correct dose, intramuscularly, subcutaneously and intravenously.						
	d. Correctly prescribe oxygen, "As Required" medication, fluids and blood products, under supervision.						
	10. Mix and inject drugs into an intravenous infusion bag and prepare and give drugs by infusion pump.						
	11. Demonstrate high professional standards and attitudes regarding relationships in the workplace, team work, confidentiality, initiative, self- directed learning and ethical issues.						
Prerequisites	None Required None						
Course content	 The diagnosis and management of common acute and elective surgical conditions The diagnosis and management of surgical complications Clean and sterile technique Scrubbing, gowning and gloving Wound dressing and bandaging Suturing and removal of sutures and staples Infection control 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 Emergency medicine skills – airway maintenance etc. Prescribing Skills Management of fluids and electrolytes 						
	 Postoperative pain control Gaining informed consent Explaining procedure to patient 						
Teaching methodology	The course is delivered by clinical placements and associated lectures. Time is allocated during the week for discussions and self-directed learning.						
Bibliography	Required textbooks/reading						

	Authors	Title	Edition	Publisher	Year	ISBN
	Brunicardi, F. Charles	Schwartz's principles of surgery	9th	McGraw-Hill	2010	9780071547703
	Raftery, Andrew T.	Applied basic science for basic surgical training		Churchill Livingstone Elsevier	2008	9780080451404
	Joint Formulary Committee	https://bestpracti ce.bmj.com/drugs	Last one	BMJ Group and Pharmaceutical Press.	Current year	
	National Institute for Health and	https://www.nice. org.uk/guidance	Last one		Current year	
	Clinical Excellence					
		I textbooks/reading			1	
	Authors	Title	Edition	Publisher	Year	ISBN
	Goldberg, Andrew.	Surgical talk: lecture notes in undergraduate surgery		Imperial College Press	2012	9781848166141
Assessment	•	 n and final year OSC rt Answer Questions t.			•	-
anguage	English					

Course title	Clinical Practice: Internal Medicine					
Course code	MD-601					
Course type	Required					
Level	Undergraduat	е				
Year / Semester	Year 6/ Semes	ter 11/12 (rotation)				
Course Lead	Professor Jose Chair, Clinical					
	Teaching Periods per Week					
ECTS	48	Large Group Learning	Small Group Learning	Clinical Practice		
		3	1	36		
Course purpose and objectives	The main objectives of the last two years of the Medicine Programme are to 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 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 work with patients who present with a medical problem across any sub-specialty of medicine. They will develop an understanding of the presentation, signs and symptoms, physical examination findings, investigations, diagnosis, treatment 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 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, 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 develop clinical reasoning and problem-solving skills at the bedside. To develop high standards of professional behaviour. To continually reinforce basic and clinical science principles learnt during the earlier part of the course. To prepare students to be able to prescribe drugs safely upon completion of their course. To ensure students are able to write prescriptions and fill out drug charts accurately. To ensure students are able to inject drugs, at the correct dose, intramuscularly, subcutaneously and intravenously. 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 medical condition, in a sensitive and caring manner. 2. Carry out a physical examination of patients. 3. Discuss a differential diagnosis for the presenting complaint. 4. Apply their knowledge of the basic and clinical sciences to identify and explain 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 and explain a treatment management plan for the patient to present to the responsible clinician. 6. Apply clinical reasoning and problem-solving skills at the bedside, using hypothesis generation, data gathering, integration of basic science, clinical medicine and evaluation of opinions. Learning outcomes 7. Demonstrate knowledge of common medical problems and medical emergencies. 8. Perform procedures common to internal medicine e.g. venepuncture, insertion of intravenous cannulae, arterial puncture, urinary catheter and nasogastric tubes, measurement of peak flow, arterial blood gases, transcutaneous pulse oximetry, setting up an intravenous fluid infusion, administration of an intravenous medicine, intramuscular injection, subcutaneous injection, insulin injection, administration of oxygen, diagnosis of death. 9. Demonstrate effective history taking in relation to prescribed drugs, over the counter medication, complementary and alternative therapies, illicit drug use and allergies. 10. Demonstrate the correct use of an in-patient prescription chart. 11. Demonstrate how to write a prescription for a patient, including effective prescription of controlled drugs.

12. Demonstrate how to prescribe at hospital admission, on-call in hospital and at

hospital discharge.

	_	_		amuscularly, subo	cutaneously and	dintravenously		
	and prepa	are and give neb	oulised drugs	•				
	_			ied, list the mai prognosis or red				
	15. Demonstr	ate high profes	sional standa	ords and attitudes	regarding relat	tionships in the		
	workplace issues.	e, team work,	confidentialit	y, initiative, self-	directed learn	ing and ethical		
Prerequisites	None			Required	None			
	The diagn	osis and manag	gement of co	nmon acute and	elective medica	l conditions		
	The preve	ntative approa	ch to healthc	are				
Course content	• Insertion	of tubes, drains	, needles					
		ition of investig nd duplex scan		ling X-rays, CT sca , pathology	ns, MRI scans, ı	ultrasound,		
	Emergency medicine skills – airway maintenance etc.							
	Prescribing skills							
	o N	lanagement of	fluids and ele	ctrolytes				
	Patient education – peak flow, spirometry, inhalers, nebulisers, glucose							
	measuren	•	110W, 3piroi11	eer y, minarers, nex	, gracese	-		
Teaching methodology	The course is d discussions.	elivered by clin	ical placemer	nts, lectures, tuto	rials, case studio	es and group		
	Required textb	ooks/reading						
	Authors	Title	Edition	Publisher	Year			
	Loscalzo J	Harrison's	20 th	McGraw	2021	9781260463		
	Kasper D	Principles of Internal		Hill, New York		040		
	Wiener C	Medicine		TOTK				
	Fauci A							
	Hauser S Longo J							
Bibliography								
	Jameson L Joint	https://best	Last one	BMJ Group	Current year			
	Formulary	practice.bmj	Last one	and	Current year			
	Committee	practice.birij		Pharmaceu				
		.com/drugs						
	National	https://ww	Last one	tical Press.	Current year			
	Institute for	w.nice.org.u	Last Oile		Current year			
	Health and							
	Clinical Excellence	k/guidance						

Assessment	Final year exam and final year OSCE. The written assessment will be Single Best Answer MCQs and Short Answer Questions. Workplace based assessments will take place during the attachment.
Language	English

Course title	Clinical Practic	ce: Emergency Medicine	and Intensive Care	
Course code	MD-601			
Course type	Required			
Level	Undergraduat	e		
Year / Semester	Year 6 / Seme	ster 11/12 (rotation)		
Course Lead	Professor Jose	ph Joseph		
	Chair, Clinical	T		
		Teaching Periods per We		_
ECTS	48	Large Group Learning	Small Group Learning	Clinical Practice
		3	1	36
Course purpose and objectives	students with also in the corpractise their and to learn a surgical, psych. In this course, medical or sur develop an unfindings, investand managem is concerned with the students who asystem support the students wexamination of the cardiovasc surgery. They surgical opera They will learn medical emergintraoperative. In a simulated of a patient. Tisplinting, as were surgery as well	nmunity, so that they can clinical, communication, obout the emergency man associal and caring perspective and the present derstanding of the present plan for emergency as with the diagnosis, managere severely ill and who unt. Will learn how to take determined the present plan for emergency as with the diagnosis, managere severely ill and who unt. Will learn how to take determined the present plan for emergency as with the diagnosis, managere severely ill and who unt. Will learn how to take determined the present plan for emergency as will learn about anaesthe tions. In to recognise the sick paragencies. They will learn as care and postoperative reward situation, they will hey will learn basic process.	the clinical environment utilise their learning diagnostic and reason reagement of patients, ective. The patients with patients with patients undergoing in thation, signs and symptoment (medical and/or and/or critically ill patients and preventions sually require intensive and imaging data or so spend time in theat etics and the roles play then the principles of management of surgice practise leading the sectoral skills such as we has fracture manager	nt, mainly in hospitals but over the previous years to ing skills on real patients, from a medical, therapeutic, a conditions requiring urgent atensive care. They will aptoms, physical examination a surgical as appropriate) ents. Critical care medicine on of complications in the monitoring and/or organ arry out systematic clinical apatients with disorders of the observing emergency are deep anaesthetists during the early management of preoperative evaluation, all patients.
Learning outcomes	By the end of	the course the students s	hould be able to:	

- 1. Assess the urgency of care required for an emergency patient (triage).
- 2. Take a focused history from a patient, or relative of a patient, who presents as an emergency, in a sensitive and caring manner.
- 3. Carry out an appropriate physical examination of patients so presenting.
- 4. Discuss a differential diagnosis for the emergency.
- 5. Apply their knowledge of basic and clinical science to identify and explain appropriate investigations, including blood, sputum and urine tests and imaging, to assist in the diagnosis of the presenting complaint and to interpret the results from such tests.
- 6. Prepare and explain a treatment management plan for the patient to present to the responsible clinician to include medical, pharmacological, surgical options as appropriate.
- 7. Demonstrate effective history taking with relation to prescribed drugs, over the counter medication, complementary and alternative therapies, illicit drug use and allergies.
- 8. Prescribe drugs safely
- a. Demonstrate how to write a prescription for a patient, including effective prescription of controlled drugs.
- b. Demonstrate the correct use of an in-patient prescription chart.
- c. Inject drugs, at the correct dose, intramuscularly, subcutaneously and intravenously.
- d. Correctly prescribe oxygen, "As Required" medication, fluids and blood products, under supervision.
- e. Administer nebulized drugs.
- 9. Calculate the strength of an infusion based on the required rate of drug administration.
- 10. Mix and inject drugs into an intravenous infusion bag and prepare and give drugs by infusion pump.
- 11. Describe the emergency assessment and resuscitation of a patient following a drug overdose.
- 12. Describe the symptoms and signs following overdose with aspirin, paracetamol, opiates, tricyclic antidepressants, benzodiazepine.
- 13. Describe the specific management including antidotes of each drug listed.
- 14. Observe, and where appropriate carry out or assist with, the following procedures: measurement of arterial blood gases, interpretation of liver function tests and coagulation studies, measurement of ECG, cardiac stress test, angiogram, echocardiogram, IV cannulation insertion, maintenance of a Guedel airway ventilation with bag and mask, endotracheal intubation, CT, MRI and PET

	scans, X-rays, ultrasound, Doppler scans, emergency surgical procedures e.g. appendectomy, planned and opportunistic.						
	15. Identify the patient who requires immediate medical attention and intervention.						
	16. Describe the initial emergency management of shock, seizures, severe respiratory distress, head trauma, and cervical spine trauma in children and describe findings suggestive of non-accidental trauma.						
	17. Describe the treatment for wounds and burns, the stabilization of orthopaedic trauma, the recognition and initial management of shock and coma, head and cervical spine trauma in adults.						
	18. Outline the specific initial management issues for abrasions, bites, burns, contusions, fractures, lacerations, near drowning, and sprains, including tetanus prevention.						
	19. Outline the diagnosis and management of acute organ failure, with particular emphasis on the cardiorespiratory system.						
	20. Describe sedation and analgesia in the critical care unit and outline parenteral and enteral nutrition in the critically ill patient.						
Prerequisites	None Required None						
Course content	 The diagnosis and management of common emergencies including cardiac arrest, shock, respiratory emergencies, seizures, renal failure, acute pain management Recognising the sick patient on the ward or in A&E The indications for the use of emergency drugs and routes of administration Oxygen therapy Choking and hyperventilation The indications for intubation Prescribing skills Local and general anaesthetics Adverse drug reactions and anaphylaxis Overdose with aspirin, paracetamol, opiates, carbon monoxide, tricyclic antidepressants, benzodiazepine The emergency assessment and resuscitation of a patient following overdose The specific management including antidotes of drugs commonly taken as 						
	I DE SUECITIC MANAGEMENT INCITIONS ANDIOUTES OF ORTHOGO COMMONIV TAKEN AS						

	Desensitisation therapy in the management of allergy to insect stings (bee, wasp) and pollen (grass, trees)						
Teaching methodology	The course is delividiscussions.	rered by clinical pla	cements,	lectures, tutor	ials, case s	tudies and group	
	Required textbook	cs/reading					
	Authors	Title	Editio n	Publisher	Year	ISBN	
	Mahadevan, Swaminatha V	An introduction to clinical emergency medicine		Cambridge University Press	2012	97805217477 69	
	Joint Formulary Committee	https://bestprac tice.bmj.com/dr ugs	Last	BMJ Group and Pharmaceu tical Press	Current year		
Bibliography	Natioal Institute for Health and Clinical	https://www.ni ce.org.uk/guida nce	Last one		Current year		
	Recommended tex	ktbooks/reading Title	Editio	Publisher	Year	ISBN	
	Knoop, Kevin J	Atlas of emergency medicine	n	McGraw Hill	2013	97800714961 86	
Assessment	*	 nd final year OSCE.				_	
Language	English						

Course title	Clinical Practice General Practice and Geriatric Medicine							
Course code	MD-601							
Course type	Required							
Level	Undergrad	luate						
Year / Semester	Year 6 / Se	emester 11/12 (rotation)						
Teacher's name	Professor J	Joseph Joseph						
reacher 3 hame	Chair, Clini	Chair, Clinical Education						
		Teaching Periods per W	Veek					
ECTS	48	Large Group Learning	Small Group Learning	Clinical Practice				
		3	1	36				
	The object	l ives of the course are:	<u> </u>					
Course purpose and objectives	growth constraints of the constr	 To understand the role played by the General Practitioner (GP) in the community. To understand the limitations of the GP and the need to refer to a secondary care centre when appropriate. To use the wealth of experience in General Practice to aid in the transition from senior student to house officer. To enhance history-taking, information giving, physical examination and procedural skills through practice with a wide range of patients. To prepare students to be able to prescribe drugs safely upon completion of their course and write prescriptions. To illustrate doctors' and other health professionals' roles working across primary and secondary care. To understand the importance of teamwork in the primary health care team. 						
Learning outcomes	1. Ou	e management of the par	hysician-patient relations					

- 3. Formulate differential diagnoses and treatment plans based on the limited information gathered in a typical GP office visit and evaluate a given treatment plan on the basis of outcome for the patient, likelihood of being implemented successfully, and the cost effectiveness of the treatment.
- 4. Manage the most common problems seen in ambulatory practice.
- 5. Maintain good patient records.
- 6. Perform procedures commonly carried out by GPs, including: urinalysis, venepuncture, throat culture, intramuscular and subcutaneous injections, ECGs, skin testing, spirometry, tympanometry, suturing, incision and drainage, casting and splinting, stool for occult blood.
- 7. Demonstrate effective history taking in relation to prescribed drugs, over the counter medication, complementary and alternative therapies, illicit drug use and allergies.
- 8. Demonstrate how to write a prescription for a patient, including effective prescription of controlled drugs.
- 9. Give subcutaneous, intramuscular and intravenous injections and prepare and give nebulised drugs. In general, for each condition studied, list the main drugs (if any) that relieve symptoms, produce a cure or improve prognosis or reduce risk of recurrence.
- Develop a caring and empathic attitude towards all patients, regardless of their background, age, skin colour, gender, sexual preference, culture, religion or social status.
- 11. Describe the concept of prevention and generalise the concept of prevention/ lifetime health monitoring and developing long-term treatment plans and goals.
- 12. Take a history from an older person, including information of functional ability and social support.
- 13. Demonstrate the ability to perform a full physical examination of elderly people including systems often affected by illness in old age (locomotor, nervous and cardio-respiratory systems).
- 14. Explain the need to respect older patients' rights regardless of their age, background, culture, lifestyle, beliefs, race, gender, sexuality, disability, social or economic status.
- 15. Communicate clearly and effectively with older patients, their relatives and colleagues from a variety of health and social care professions.
- 16. Discuss the balance between prolongation and quality of life.
- 17. Describe the assessment, investigation and management of an elderly patient with falls, delirium, dementia, reduced mobility or incontinence.
- 18. Describe the process and principles of rehabilitation in hospital and community settings, the importance of functional assessment and what may

		y be achieved, the nomic factors.	importan	ce of go	oal sett	ing, and t	he influence of		
		ndications for refe		-	-				
		20. Outline the many roles played by a wide range of health professionals in caring for elderly patients.							
	Discuss the ethical and legal issues relating to older people including: consent to treatment, capacity to make decisions, safe-guarding finances, withdrawing and withholding treatment, elder abuse and cardio-pulmonary resuscitation decisions.								
Prerequisites	None	None Required None							
Course content	 The diagnosis and management of common General Practice presentations affecting all the systems of the body including minor illnesses, obstetric and gynaecological conditions, childhood illnesses, infectious diseases and immunisations, mental health issues Problem formulation and differential diagnosis recognising the biopsychosocial dimensions of illness Development of management plans Discriminatory use of investigations including phlebotomy, measuring blood pressure measuring blood glucose, urinalysis Prescribing skills Adoption of preventative approach to healthcare including patient education Dealing with elderly patients presenting with falls, incontinence, delirium, dementia, confusion and reduced mobility Rehabilitation and residential care Breaking bad news Dealing with ethical issues Writing referral letters and hospital discharge letters 								
Teaching methodology	The course is deliv group discussions.		acements,	lecture	s, tuto	rials, case	studies and		
	Required textbook	cs/reading							
Bibliography	Authors	Title	Editio n	Publis	her	Year	ISBN		

	Stephenson,	A textbook of		Hodder	2011	978144412064
	Anne. (ed.)	general		Arnold		6
		practice				
	Woodford,	Essential		Radcliffe	2010	978146194269
	Henry	geriatrics				
	Timiras, Paola	Physiological		Informa	2007	978084937305
	S.	basis of aging		Healthcare		3
		and geriatrics				
	Joint Formulary	https://bestpra	Last	BMJ Group	Curren	
	Committee	ctice.bmj.com/	one	and	t year	
		drugs		Pharmaceu		
				tical Press		
	National	https://www.ni	Last		Curren	
	Institute for	ce.org.uk/guida	one		t year	
	Health and	nce				
	Clinical					
	Excellence					
	Recommended tex	xtbooks/reading				
	Authors	Title	Editio n	Publisher	Year	ISBN
	Fillit, Howard	Brocklehurst's	7 th	Saunders/	2010	978141606231
		textbook of		Elsevier		8
		geriatric				
		medicine and				
		gerontology				
	Final year exam ar					_
Assessment	Answer MCQs and		estions. W	orkplace base	d assessn	nents will take
	place during the a	ttachment.				
Language	English					