Kenya Medical Training College
Faculty of Clinical Sciences

Department of Clinical Medicine

Course Outlines for
Diploma in Clinical Medicine and Surgery

February 2019

Contents

Kenya Medical Training College
Department of Clinical Medicine

Course Outline
For

Psychology

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline for Psychology

Code: **PSY 113**
Hours: 22
Credit: 2

Pre-requisite; Communication Skills
Competence
This module is designed to enable the learner apply principles of human psychology in health care.

Module Outcomes

By the end of this module, the learner should;

1. Demonstrate understanding of the influence of psychology on health.
2. Demonstrate understanding of the physical, cognitive and socio-emotional influences on human behavior
3. Demonstrate understanding of motivation and emotion influence on human behavior.

4. Demonstrate understanding of personality influences on health care.

Content Delivery

Week	Dates		Unit
	From	To	
Week 1:			Introduction to psychology
Week 2:			Foundations of psychology
Week 3			Contemporary approaches
Week 4			Relevance of psychology in health
Week 5:			Human growth and development
Week 6:			Theories of development
Week 7:			Stages of development
Week 8:			Cognitive psychology
Week 9:			Motivation and emotions
Week 10:			Theories of motivation and emotions
Week 11			Types of motivation and emotions
Week 12:			Emotions
Week 13:			**Personality**
Week 14:			Types of personalities
Week 15:			Theories of personalities
Week 16:			Theories of personalities
Week 17:			Revision
Week 18:			**End of Semester Examinations**

Module Content

Introduction to psychology; historical background, foundations of psychology, goals of psychologyschools of thought, contemporary approaches, methods used in studying psychology, branches, relevance of psychology in health care practice**. Human growth and development;** factors influencing human development**,** theories of development,stages of human development: Prenatal Development; Neonatal; infancy; childhood; puberty; adolescence; adulthood, old age, aging, death and dying.**Cognitive psychology;** learning, memory, thinking, language, intelligence.**Motivation and emotions;** Motivation types,theories, types of motives, Emotions-Physiology, chemistry, theories, expression, and experience. **Personality;** types, theories of personality development.

Teaching Strategies

Interactive Lectures, Small Group Tutorials, Case Studies, Case Scenarios, Simulations and Small Group Assignments

Teaching/Learning Resources

Laptop, Computer, Overhead projector, LCD projector, white board markers, Permanent Markers, white board, Charts,

Assessment Strategies;

Formative:Continuous assessment tests, individual assignments and group assignments***Summative:***End of Semester Examination

References/Further Readings

Chance, P. (2013).Learning and Behaviour. Belmont, CA: Wadsworth, Cengage Learning.

Davey, G. (2008). Complete psychology (2nd Edition). London, UK: Hodder& Stoughton Publishers

Kasschau R.A (2003). Understanding Psychology. Glencoe: McGraw – Hill publishers Publishers

Santrock J.W. (2009).Lifespan Development.(12th Edition). Boston: McGraw Higher

Sdorow, L. M. (2005). Psychology.(6th Edition). Belmont, CA: Wadsworth, Cengage Learning

Prepared By: Name: _____
Signature: _____
Date: _____

Approved By: Name: _____
Signature: _____
Date: _____

Kenya Medical Training College
Department of Clinical Medicine

Course Outline
For
Diploma in Clinical Medicine & Surgery

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course outline for Human Anatomy I

Code: **HAT 116**
Hours: 60
Credit: **10**

Module Competence

This module is designed to enable the learner demonstrate understanding of human anatomy in management of patients.

Module Outcomes

By the end of this module, the learner shall be able to:

1. Demonstrate an understanding of introduction to human anatomy.
2. Use knowledge on levels of structural organization.
3. Apply knowledge of embryology.
4. Describe body cavities.
5. Demonstrate understanding of body systems.

Content Delivery

Week	Dates		Unit
	From	To	
Week 1:			Introduction to human anatomydefinitions, sub-disciplines of anatomy, anatomical terminologies (body positions,;
Week 2:			Introduction to human anatomy; regional names, directional terms) planes and sections
Week 3			Levels of structural organization; chemical (chemical elements),
Week 4			Levels of structural organization; cellular (cell-parts of cell, plasma membrane, cytoplasm, and organelles),
Week 5:			Levels of structural organizationtissue histology-types (epithelial, connective, muscular and nervous),
Week 6:			Embryologystructure and locations, organ systems and organisms
Week 7:			Embryology;cell division (mitosis, meiosis), gametogenesis, fertilization
Week 8:			C.A.T
Week 9:			Embryology; embryogenesis and organogenesis
Week 10:			Body cavities;cranial, thoracic, abdominal and pelvic cavity, abdominopelvic regions and quadrants, planes and sections;
Week 11			Body systems– musculo-skeletal system; type of bones, bone surface markings; axial and appendicular skeleton. Joints - classification

Week 12:		Body systemsMuscular System; principles skeletal muscles (origin, insertion, action and nerve supply);
Week 13:		Body systems; Lymphatic system; structure, location of lymphatic tissues.
Week 14:		**Body systems;Digestive System**; organization of the digestive tract, organs and the accessory organs of digestive system
Week 15:		**Body systems; Respiratory system; organs, accessory organs**
Week 16:		Body systems; **Genito urinary**; organs for reproduction and urinary function,
Week 17:		Body systems; **nervous** – central (brain, spinal cord, peripheral (cranial nerves, spinal nerves, neuromuscular junctions and nerve endings,
Week 18:		End Semester Examinations

Module Content

Introduction; introduction to human anatomy,definitions, sub-disciplines of anatomy, anatomical terminologies (body positions,regional names,directional terms)planes and sections, **Levels of structural organization**;chemical (chemical elements),cellular(cell-parts of cell,plasma membrane,cytoplasm, and organelles),tissuehistology-types(epithelial,connective,muscular and nervous), structure and locations,organ systems and organisms.**Embryology;**cell division (mitosis, meiosis), gametogenesis, fertilization, embryogenesis and organogenesis.

Body cavities; cranial, thoracic, abdominal and pelvic cavity,abdominopelvic regions and quadrants,planes and sections.**Body systems;** skeletal system; type of bones,bone surface markings;axial and appendicular skeleton.Joints-classification. **Muscular** System;principlesskeletal muscles(origin,insertion,action and nerve supply).**CardiovascularSystem;** heart(cardiac muscle, valves), blood vessels (Aorta, veins of systemic circulation). **Lymphatic system**; structure,location of lymphatic tissues.**Digestive System;** organization of the digestive tract, organs and the accessory organs of digestive system.**Respiratory system**; organs, accessory organs.**Genito-urinary system** (reproductive and urinary), **Nervous system** – central peripheral systems

Teaching Strategies

Interactive Lectures, Small Group Tutorials, Case Studies, Case Scenarios, Simulations and Small Group Assignments

Teaching/Learning Resources

Laptop, Computer, Overhead projector, LCD projector, White board markers, Permanent Markers, White board, Charts,

Assessment Strategies;

Formative:Continuous assessment tests, individual assignments and group assignments***Summative:*** End of Semester Examination

References/Further readings

Gerard, ,J.T and Bryan ,D.(2010). Principles of Anatomy and Physiology International (16thEdition). Amazon Publishers Ltd., New jersey, USA.

Drake, R. L. Vogl, W. A. and Mitchell, A.W.M. (2005) *Grays' Anatomy for Student's*. Toronto, Ontario, Canada: Elsevier Churchill Livingstone.

Netter, F.H. (2010).Atlas of human Anatomy.(5th Edition).Saunders Elsever Publishers Ltd. Philadelphia: USA.

Torslem,B.M.(2000). Pocket Atlas of Radiographic Anatomy.(2nd Education). Amazon Publishers Thieme Stuttgart. Germany.

Keith L.M and Anne, M.R.A(2007).nClinically Oriented Anatomy.(2nd Edition). Elsevier Publishers Ltd 530Walnut S,treet,Philadelphia PA 191O6, USA.

Brue,I.and Victoria, H.O (2007). Integrated Anatomy and Embryology.(2nd Edition). Elsevier Publishers Ltd. New York, USA.

New York.

Snell R.S.(2008). Clinical Anatomy by regions 8thed. Philadelphia.

Tixas,S.(2007)Atlas of surface palpation Anatomy of the neck,Truck,Upper and Lower limbs , (2nd Edition).Churchill Livingstone.Philadelphia, USA.

Prepared By: Name: _____
Signature: _____
Date: _____

Approved By: Name: _____

Signature: _____
Date: _____

KENYA MEDICAL TRAINING COLLEGE
DEPARTMENT OF CLINICAL MEDICINE

COURSE OUTLINE FOR BASIC DIPLOMA COURSE

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline for Medical Physiology I
Code: MEP116
Hours: 60
Credit: 6

Module Competence

The module is designed to enable the learner demonstrate the understanding of the function of human body in relation to diagnosis and management of disease.

Module Learning Outcomes

By the end of this module, the learner shall be able to

1. Demonstrate the understanding of the cellular organelles functioning
2. Establish the role of body fluids compartments in regulation of fluids and electrolytes
3. Demonstrate the understanding of blood and lymphatic components and their functions

4. Demonstrate understanding of function of respiratory system
5. Integrate the knowledge of functions and vital measurements used in cardiovascular system.

   6 Describe the functions of the different muscles types

Content Delivery

Week	Dates		Unit
	From	**To**	
Week 1:			**Introduction and cell biology-** definitions, scope and importance of physiology, cell structures, functions of the cell organelle, cell reproduction/cell genetics, homeostasis and homoestatic
Week 2:			cell reproduction/cell genetics, homeostasis and homoestatic cell reproduction/cell genetics, homeostasis and homoestaticcontrol mechanism
Week 3			mechanism of transport across cell membrane, translocation of materials, functional classification of tissues. **Body fluid compartments** - composition of body fluids,
Week 4			regulation of fluid and electrolyte and temperature, water balance, role of hypothalamus
Week 5:			terms used in body fluid movement-(diffusion,osmosis,hydrostaticpressure,colloid,osmotic pressure), units of measuring concentration of solutes
Week 6:			**Blood and lymphatic system-** composition of blood, haemopoiesis, normal blood cells count, factors that affect blood volume .
Week 7:			haemoglobin: structure and function, leucocytes, classification and functions
Week 8:			platelets,blood typing, lymph, lymph vessels, reticulo-endothelial system.
Week 9:			**CATs**
Week 10:			**Respiratory system**- structural function,defence mechanism of pulmonary ventilation regulation of respiration
Week 11			; volumes and capacities,oxygen exchange defiencies. **Cardiovascular system** - review Structure of blood vessels and heart
Week 12:			, blood circulation, conduction system of the heart, The cardiac cycle, heart sounds,
Week 13:			autonomic influence on the heart ECG, blood pressure maintenance and measurements.

Week 14:		
Week 15:		**Muscular – skeletal System -** muscle function, contractile process, skeletal, cardiac and smooth muscles.
Week 16:		Revision
Week 17:		Study Week
Week 18:		**End of Semester Examinations**

Learning Strategies

Lectures, demonstration, group discussions, individual assignments and case studies

Learning/teaching Resources

Laptop computer, projector, 3D pictures, videos, charts, white board and whiteboard markers

Assessment Strategies

Formative: CAT(s) accounts for 40% of the total marks
Summative: End of Semester Examinations accounts for 60% of the total marks

References/Further Readings

World Health Organization, (2010).Community Based Rehabilitation; CBR guidelines. Malta; WHO Press

Prepared By: Name: _____

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Date: _____

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Signature: _____

Date: _____

Kenya Medical Training College
Department of Clinical Medicine

Course Outline
For
Higher Diploma in Clinical Medicine &Surgery
(Clinical Methods I)

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline for Clinical Methods I

Code: **CLM 113**
Hours: 30
Credit: 3

Competence
Enable the learner to communicate effectively, take appropriate history and perform physical examination.

Module Outcomes

By the end of this module, the learner should:

1. Communicate professionally and take relevant history.
2. Perform general examination and take vital signs.
3. Perform respiratory system examination

4. Perform cardiovascular system examination
5. Perform abdominal examination

Content Delivery

Week	Dates		Unit
	From	To	
Week 1:			**History taking** - communication skills in history taking Format (schema), biodata,
			Chief complain and duration History of presenting illness
Week 3			,Past medical and surgical history Personal social economic history, Family history, Review of system
Week 4			**General examination and vital signs** – general survey, clinical signs,
Week 5:			Vital signs – temperature Pulse Respiratory rate
Week 6:			Blood pressure
Week 7:			**Examination of the respiratory system.** Signs andSymptoms of the respiratory system,
Week 8:			Inspection Palpation Percussion Auscultation
Week 9:			**CATs,**
Week 10:			Investigations in the respiratory system – chest X-ray, sputum examination, haematological tests endoscopy
Week 11			**Cardiovascular system examination** Signs and symptoms of the cardiovascular system Inverted J
Week 12:			CVS exam -precordium (IPPA) inspection, palpation, percussion, auscultation
Week 13:			Practicum – inverted J Cardiorespiratory ratio JVP- Jugular venous pressure

		Investigations – chest x-ray Other diagnostic tests ECG, Echo
Week 14:		**Digestive system and abdominal examination** Signs and symptoms of the GIT Abdominal examination Techniques - Inspection
Week 15:		Auscultation, Palpation, Percussion
Week 16:		Diagnostic tests: Digital rectal examination, Abdominal paracentesis, ascetic tap
Week 17:		**Practicum – OSCE** (Objective Structured Clinical Examination).
Week 18:		**End of Semester Examinations**

Module Content

Communication skills in History taking; Patients interview; clinician- client relationship, questioning skills, listening skills, giving feedback, history format: Biodata, chief complain, history of presenting illness, past medical and surgical history, personal social economic history, family history. Review of systems. **General examination and Vital signs –** General survey; clinical signs**;** Temperature, Pulse, Respiratory rate, Blood pressure**,** In children:- weight, head circumference, upper arm circumference and length, In adults:- calculation of body mass index (BMI). **Respiratory system examination** - Common signs and symptoms: Examination Technique, inspection, palpation, percussion and auscultation, (IPPA). Chest x - ray and endoscopy, sputum examination hematological tests.**Cardiovascular system examination**: Examination Technique; Inverted 'J' Chest x ray for cardiorespiratory ratio. Other diagnostic procedures.**Digestive system and abdominal examination** - Common signs and symptoms of GIT. Examination Technique; abdominal examination: Inspection, auscultation, Palpation, Percussion: Digital rectal examination; other therapeutic and diagnostic procedures like abdominal paracentesis, ascitic tap.

Teaching Strategies

Interactive Lectures, Demonstrations, Small Group Tutorials, Group Assignments, Role play, Virtual reality, e-learning.

Teaching/Learning Resources

Procedure manuals**,** Laptop / computer, LCD projector, white board markers, permanent markers, white board, Charts, 3D Pictures, videos, surgical instruments, manikins, models.

Assessment Strategies

Formative: CAT(s) accounts for 40% of the total marks

Summative: End of Semester Examinations accounts for 60% of the total marks

References/Further Readings

Glynn, M., Deake, W. M., and Hutchson R., (2012). Hutchison's Clinical Methods:

An integrated Approach to clinical practice.Edinburgh Elsevier latest edition.

Houghton A.R, Gray D. and Chamberlain, E.R. (2010).

Chamberlains Clinical signs and symptoms in Clinical Medicine. London, Hodder Arnold.

Lumley, J.S.P and Bailey H. (2001) Hamilton Baileys physical signs:

Demonstration of physical signs: in Clinical Surgery.

Macleod J. Douglas G. Nicol, E. F. and Robertson C. (2009).

Macleod's Clinical Examination Edinburg; Churchill Livingstone/ Elsevier

Tally N. J. and O' Conner, S. (2001). Clinical examination:

A Systemic Guide to physical diagnosis. Diagnosis, Oxford: Blackwell science.

Thomas J. and Mohaghan T. (2014) Oxford Hand book of clinical examination

and practical skills. Oxford University press.

Prepared By: Name: _____
Signature: _____
Date: _____

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Signature: _____
Date: _____

Kenya Medical Training College
Department of Clinical Medicine

Course Outline
For
Higher Diploma in Clinical Medicine &Surgery
(Clinical Methods 1)

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline for Clinical Methods I

Code: **CLM 113**
Hours: 30
Credit: 3

Competence
Enable the learner to communicate effectively, take appropriate history and perform physical examination.

Module Outcomes

By the end of this module, the learner should:

1. Communicate professionally and take relevant history.
2. Perform general examination and take vital signs.
3. Perform Respiratory system examination

4. Perform cardiovascular system examination
5. Perform abdominal examination

Content Delivery

Week	Dates		Unit
	From	To	
Week 1:			**History taking** - communication skills in history taking Format (schema), biodata,
			Chief complain and duration History of presenting illness
Week 3			,Past medical and surgical history Personal social economic history, Family history, Review of system
Week 4			**General examination and vital signs** – general survey, clinical signs,
Week 5:			Vital signs – temperature Pulse Respiratory rate
Week 6:			Blood pressure
Week 7:			**Examination of the respiratory system.** Signs andSymptoms of the respiratory system,
Week 8:			Inspection Palpation Percussion Auscultation
Week 9:			**CATs,**
Week 10:			Investigations in the respiratory system – chest X-ray, sputum examination, haematological tests endoscopy
Week 11			**Cardiovascular system examination** Signs and symptoms of the cardiovascular system Inverted J
Week 12:			CVS exam -precordium (IPPA) inspection, palpation, percussion, auscultation
Week 13:			Practicum – inverted J Cardiorespiratory ratio JVP- Jugular venous pressure

		Investigations – chest x-ray Other diagnostic tests ECG, Echo
Week 14:		**Digestive system and abdominal examination** Signs and symptoms of the GIT Abdominal examination Techniques - Inspection
Week 15:		Auscultation, Palpation, Percussion
Week 16:		Diagnostic tests: Digital rectal examination, Abdominal paracentesis, ascetic tap
Week 17:		**Practicum – OSCE** (Objective Structured Clinical Examination).
Week 18:		**End of Semester Examinations**

Teaching Strategies

Interactive Lectures, Demonstrations, Small Group Tutorials, Group Assignments, Role play, Virtual reality, e-learning.

Teaching/Learning Resources

Procedure manuals**,** Laptop / computer, LCD projector, white board markers, permanent markers, white board, Charts, 3D Pictures, videos, surgical instruments, manikins, models.

Assessment Strategies

Formative: CAT(s) accounts for 40% of the total marks

Summative: End of Semester Examinations accounts for 60% of the total marks

References/Further Readings

Glynn, M., Deake, W. M., and Hutchson R., (2012). Hutchison's Clinical Methods:

An integrated Approach to clinical practice.Edinburgh Elsevier latest edition.

Houghton A.R, Gray D. and Chamberlain, E.R. (2010).

Chamberlains Clinical signs and symptoms in Clinical Medicine. London, Hodder Arnold.

Lumley, J.S.P and Bailey H. (2001) Hamilton Baileys physical signs:

Demonstration of physical signs: in Clinical Surgery.

Macleod J. Douglas G. Nicol, E. F. and Robertson C. (2009).

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Tally N. J. and O' Conner, S. (2001). Clinical examination:

A Systemic Guide to physical diagnosis. Diagnosis, Oxford: Blackwell science.

Thomas J. and Mohaghan T. (2014) Oxford Hand book of clinical examination

and practical skills. Oxford University press.

Prepared By: Name: _____
Signature: _____
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Date: _____

Kenya Medical Training College
Department of Clinical Medicine

Course Outline
For
Diploma in Clinical Medicine & Surgery

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline for Parasitology and laboratory techniques I

Code: **MPL 113**
Hours: 30
Credit: 3

Competence
Explain the mechanism by which parasites cause diseases in the human body, control and preventive measures of those diseases.

Outcomes

1. Demonstrate understanding of parasitology
2. Classify helminthes

Content Delivery

Week	Dates		Unit
	From	To	
Week 1:			Introduction to parasitology

Week 2:		Introduction to helminths and general characteristics of cestodes
Week 3		Cestodes
Week 4		Cestodes
Week 5:		Cestodes
Week 6:		General characteristics and classification of trematodes
Week 7:		Trematodes
Week 8:		Trematodes
Week 9:		**CATs,**
Week 10:		Trematodes
Week 11		Trematodes
Week 12:		General characteristics and classification of nematodes
Week 13:		Nematodes
Week 14:		Nematodes
Week 15:		Nematodes
Week 16:		Nematodes
Week 17:		Revision
Week 18:		**End of Semester Examinations**

Module Content

Introduction to parasitology; definition of terms, classification of parasites, sources of infections, modes of transmission and host-parasite relationship.**Helminthology;**introduction, classification, modes of transmission, life cycles, preventive and control measures (cestodes, trematodes, nematodes)

Teaching Strategies

Interactive Lectures, Small Group Tutorials and Small Group Assignments.

Teaching/Learning Resources

Computer, Overhead projector, LCD projector, White board markers, Permanent markers, White board, Charts.

Assessment Strategies

Formative; Continuous Assessment Tests, Individual Assignments and Group Assignments

Summative; End of module examination

References/Further readings

Arora, D.R. (2010). *Medical parasitology*.3rd Ed. CBS Publishers & Distributors PVT.Ltd. New Delhi, India.

Chakraborty, P. (2013). *Textbook of MEDICAL PARASITOLOGY*.2nd Ed. New Central Book Agency (P) Ltd. London, U.K.

Prepared By: Name: _____
Signature: _____
Date: _____

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Signature: _____
Date: _____

Kenya Medical Training College
Department of Clinical Medicine

Course Outline
For
Diploma in Clinical Medicine &Surgery
(MEDICAL MICROBIOLOGY 1)

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline for Medical Microbiology 1

Code: MEM
Hours: **30**
Credit: **3**

Competence
To enable the learner diagnose and manage microbial diseases in the human body.

Module Outcomes
By the end of this module, the learner should;

1. Apply principles, concepts and terminologies used in microbiology.
2. Classify the cocci
3. Classify bacilli

Content Delivery

Week	Dates		Unit
	From	To	
Week 1:			Introduction; definition of terminologies
Week 2:			structure and functions of prokaryotic and eukaryotic cells,
Week 3			staining procedures, preventive and control measures
Week 4			**Bacteriology 1** – cocci; classification of cocci, characteristics,
Week 5:			classification of cocci, characteristics
Week 6:			transmission, clinical presentation, diagnosis, prevention and control measures
Week 7:			
Week 8:			
Week 9:			**CATs,**
Week 10:			**Bacteriology 11** – bacilli; classification of bacilli
Week 11			classification of bacilli
Week 12:			Classification of bacilli
Week 13:			Characteristics, transmission, clinical presentation,
Week 14:			diagnosis, prevention and control measure
Week 15:			Characteristics, transmission, clinical presentation, diagnosis, prevention and control measures.
Week 16:			Characteristics, transmission, clinical presentation, diagnosis, prevention and control measures.
Week 17:			Revision and study week
Week 18:			**End of Semester Examinations**

Module Content

Introduction; definition of terminologies, structure and functions of prokaryotic and eukaryotic cells, staining procedures, preventive and control measures.**Bacteriology 1** – cocci; classification of cocci, characteristics, transmission, clinical presentation, diagnosis, prevention and control measures.**Bacteriology 11** – bacilli; classification of bacilli, characteristics, transmission, clinical presentation, diagnosis, prevention and control measures.

Teaching Strategies

Interactive Lectures, Small Group Tutorials and Small Group Assignments, Case Scenarios

Teaching/Learning Resources

Laptop, Computers, LCD Projector, White boards and Markers, Permanent Markers, Histology Laboratory

Assessment Strategies

Formative: Continuous Assessment Tests, Individual assignments and Group Assignments.

Summative: End of Semester Examinations

References/Further Readings

Mims, C. A. (2004). *Medical Microbiology*. Edinburg: Mosby

Murray, P. R., and Baron, E. J. (2007).*A Manual of Clinical Microbiology*.Washhington: ASM Press

Turk, D.C. (1978). *A short Textbook of Microbiology*. London. Hodder and Stroughton.

Prepared By: Name: _____
Signature: _____
Date: _____

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Signature: _____
Date: _____

Kenya Medical Training College

Department of Clinical Medicine

Course Outline

For

Diploma in Clinical Medicine &Surgery

(General Pathology 1)

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline for General Pathology 1

Code: **GEP**

Hours: 30

Credit: 3

Pre- requisite (s): KSCE with Biology, chemistry, physics ,or mathematics and English.

Competence

To enable the learner to understand the disease and its processes in the body

Outcomes

By the end of this module the learner should:

1. Demonstrate understanding of the concepts used in general pathology
2. Apply appropriate methods and principles used in diagnosing pathological conditions
3. Explain the causes and processes of cell disorders
4. Explain the process of inflammation, wound healing and repair.

Content Delivery

Week	Dates		Unit
	From	To	
Week 1:			Terminologies and concepts used in pathology
Week 2:			Review of cell structure and cell division
Week 3			General Classification of diseases and their causes
Week 4			Aspects of pathology and methods of studying pathology
Week 5:			Cell degenerations
Week 6:			Necrosis and gangrene
Week 7:			Concepts used in neoplasms and causes of neoplasms
Week 8:			Classification of neoplasms, spread and general management
Week 9:			**CATs,**
Week 10:			Definition, nature and types of inflammation
Week 11			Tissue response to injury

Week 12:		Cells found in various types of inflammation
Week 13:		Immune response in inflammation
Week 14:		Mechanisms of wound healing
Week 15:		Factors influencing wound healing and repair
Week 16:		Complications of wound healing and repair
Week 17:		Aging process
Week 18:		**End of Semester Examinations**

Module Content

Concepts in general pathology: Terminologies, branches of pathology, review of cell structure, cell division, classification of diseases, general causes of diseases and mechanisms of disease processes. **Methods and principles of diagnosis**: aspects of pathology and methods of studying pathology. **Cell disorders**: cell degenerations, necrosis and gangrene, neoplasms. **Inflammation and healing**: definition, pathogenesis, causes, types, tissue response to injury, outcomes of inflammation, types of wounds, mechanisms of wound healing, factors influencing wound healing and repair, complications of wound healing. Body aging process.

Teaching Strategies

Lectures and tutorials.

Teaching/Learning Resources

Laptop computer, overhead projector, LCD projector, white board markers, permanent markers, white board, Charts, 3D Pictures.

Assessment Strategies

Formative: CAT(s) accounts for 40% of the total marks

Summative: End of Semester Examinations accounts for 60% of the total marks

References and Further Readings

Kishasha M (2016). *Textbook of human pathology*. 1st edition, Acrodile publishers, Nairobi, Kenya.

Harsh M (2014).*Textbook of Pathology*.1st edition. New Delhi: Jaypee Brothers, Medical Pub, India

NgtonC,& Muir (2014). *Textbook of Pathology*.15th edition, New Delhi.Jaypee Brothers, India

Prepared By: Name: _____

Signature: _____

Date: _____

Approved By: Name: _____

Signature: _____

Date: _____

Kenya Medical Training College
Department of Clinical Medicine

Course Outline
For
Diploma in Clinical Medicine & Surgery

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course outline for Biochemistry I

Code:	**MBC 103**
Hours:	**30**
Credit:	**03**

Module Competence: This module is designed to enable the learner to apply concepts and principles of medical biochemistry in clinical practice.

Module Outcomes

By the end of this module the learner should:

1. Describe concepts and principles of biochemistry
2. Explain the structure, property and function of Water, electrolytes, vitamins, enzymes
3. Explain structure, property and function of protein, lipids and carbohydrates
4. Discuss protein/nucleotide metabolism and disorders

Content Delivery

Week	Dates		Unit
	From	To	
Week 1:	**Essentials of Biochemistry**		definitions, uses of biochemistry, chemical bonds, terminologies Biochemical basis of life, Medical uses of biochemistry Chemical bonding
Week 2:			chemical bonds, protein synthesis.
Week 3	**Biomolecules I**		Water, electrolytes, bonds Classification, common physical properties. Properties of water, Electrolytes, pH and buffering system and functional group
Week 4	**vitamins,**		structure classification, functions, deficiencies, sources Structure, Roles as co-enzymes, Physiological roles
Week 5:	**amino acids**		, properties of Amino acids classifications, essential and non essential amino acids and structure
Week 6:	**Biomolecules II**		Proteins, classifications, functions, structure
Week 7:			Carbohydrates, structure, classifications and their functions
Week 8:			
Week 9:	Cat		
Week 10:	**Metabolism I**		Protein and nucleotide metabolism Protein synthesis: DNA/RNA
Week 11			Diseases associated with metabolism like, ketonuria, gout, phenylketonuria
Week 12:			metabolism of proteins, ,urea cycle, deamination and transamination functions
Week 13:			
Week 14:			
Week 15:			
Week 16:	End of semester examination		
Week 17:			
Week 18:			

Module Content

Essentials of Biochemistry; definitions, uses of biochemistry, chemical bonds, protein synthesis.**Biomolecules I -** Water, electrolytes, enzymes, vitamins, amino acids.**Biomolecules II -** Proteins, carbohydrates and lipids. **Metabolism I -** Protein and nucleotide metabolism, gout, phenylketonuria.

Teaching Strategies

Interactive Lectures, Small Group Tutorials, Case Studies, Case Scenarios, Simulations and Small Group Assignments

Teaching/Learning Resources

Laptop, Computer, Overhead projector, LCD projector, white board markers, Permanent Markers, white board, Charts,

Assessment Strategies;

Formative:Continuous assessment tests, individual assignments and group assignments***Summative:***End of Semester Examination

References/Further Readings

Nelson D. And Cox M. (2005) Lehninger's Principles of Biochemistry (4th Edition). Amazon, London, UK.

Murray RK et al (2006) Herpe's illustrated biochemistry 22nd Edition, the McGraw-Hill Companies

Chatterjea M.N., Rana S.(20150. Text book of Medical Biochemistry.(8TH Edition). Jaypee Brothers Publishers LTD, Punjab, India.

Prepared By: Name: _____
Signature: _____
Date: _____

Approved By: Name: _____
Signature: _____
Date: _____

Kenya Medical Training College

Department of Clinical Medicine

Course Outline

For

Diploma in Clinical Medicine &Surgery

Course Outline for Pharmacology and Therapeutics I

Code: PTH 113
Hours: 30
Credit: 3

Competence

Apply principles and concepts in pharmacology and therapeutics and treat parasitic infections effectively.

Outcomes

1. Explain the principles and concepts of pharmacology and therapeutics
2. Demonstrate understanding of absorption, bioavailability, distribution, biotransformation and elimination of drugs
3. Apply principles of drug mode of action, drug interactions, adverse effects, and manage adverse drug reactions
4. Prescribe anti-parasitic agents appropriately

Content Delivery

Week	Dates		Unit
	From	**To**	
Week 1:			**Introduction to pharmacology and therapeutics**; definitions, terminologies, sources of drugs,

			classification of drugs, nomenclature/naming of drugs
Week 2:			Principles and concepts in pharmacology and therapeutics; use of drugs, factors to consider before treating patients with drugs, factors influencing responses to drugs, patient compliance, benefits and risks of drug use
Week 3			Preparations/ Formulations of drugs; Routes of drug administration; Essential drugs list and Rational use of drugs; Principles of drug prescribing; Pharmacy and Poisons Act and Dangerous Drugs Act.
Week 4			**Pharmacokinetics**: drug movement across biological membranes
Week 5:			**Pharmacokinetics**: absorption &bioavailability of drugs, distribution of drugs.
Week 6:			**Pharmacokinetics**:metabolism of drugs, excretion of drugs, plasma half-life and its significance
Week 7:			**Pharmacodynamics**: importance, site of drug action, structure-activity relationships, mechanisms of drug action.
Week 8:			**Pharmacodynamics**: dose-response relationships, drug potency, efficacy & therapeutic index
Week 9:			**CATs**
Week 10:			**Pharmacodynamics**:factors modifying drug action.
Week 11			**Pharmacodynamics**: unwanted effects of drugs; causes, classification and discussion

Week 12:			**Pharmacodynamics:** unwanted effects of drugs; prevention of adverse effects of drugs, allergy in response to drugs, effects of drugs on reproduction
Week 13:			**Anti-parasitic agents**: anthelmintics; classification and discussion
Week 14:			**Anti-parasitic agents**: anti-protozoalagents;antimalarials (classification, quinine, artemisinins,treatment of malaria)
Week 15:			**Anti-parasitic agents**: anti-protozoalagents;antimalarials(other antimalarial drugs)
Week 16:			**Anti-parasitic agents**: anti-protozoalagents;antiamoebic agents, antileishmania agents, antitrypanosoma agents
Week 17:			Study Week
Week 18:			**End of Semester Examinations**

Module Content

Introduction to Pharmacology and Therapeutics; definitions of terminologies, general principles and concepts in pharmacology and therapeutics, sources of drugs, formulations/preparations of drugs, classification and naming of drugs, routes of drug administration, the concept of essential drugs and rational use of drugs, Pharmacy and Poisons Act & Dangerous Drugs Act, principles of drug prescribing. **Pharmacokinetics;** drug movement across biological membranes, drug absorption and bioavailability, drug distribution and plasma protein binding, drug metabolism, excretion of drugs, biological half-life of drugs. **Pharmacodynamics;** importance, site of drug action, structure-activity relationships, mechanisms of drug action, dose-response relationships - drug potency, efficacy & therapeutic index, factors modifying drug action, unwanted (adverse) effects of drugs (causes, classification**,** prevention of adverse effects of drugs), allergy in response to drugs, effects of drugs on reproduction. **Anti-parasitic Agents**: anthelmintics, antiprotozoal agents (antimalarial agents, antiamoebic agents, antileishmania agents, antitrypanosoma agents).

Teaching Strategies

Interactive Lectures, Small Group Assignments, and Small Group Discussions

Teaching/Learning Resources

Computer, LCD Projector, White Board Markers, Permanent Markers, White Board, Charts, Chalk, Chalk Board.

Assessment Strategies

***Formative*:** Continuous Assessment Tests, Individual Assignments and Group Assignments

***Summative*:** End of Semester Examination

References/Further Readings

1. Bennett, P., & Brown, M. (2009). *Clinical Pharmacology.* London: Churchill Livingstone, ELSEVIER.
2. Katzung, B. G., & Trevor, A. J. (2012). *Basic & Clinical Pharmacology.* London: LANGE.

Mary, J. (2008). *Pharmacology*, LippincottWilliams and Wilkins

3. Njau, E. (2014). *Pharmacology and Therapeutics.* Nairobi: Amref.
4. Rang, H., Dale, M., Ritter, J., Flower, R., & Henderson, G. (2012). *Rang and Dale`s Pharmacology.* London: Churchill Livingstone, ELSEVIER.

Satoskar, R. (2007). *Pharmacology and Pharmacotherapeutics*(6th edition).

5. Tripathi, K. (2013). *Essentials of Medical Pharmacology.* 4th edition. New Delhi: Jaypee.

Prepared by: Name: _____

Signature: _____

Date: _____

Approved by: Name: _____

Signature: _____

Date: _____

Kenya Medical Training College
Department of Clinical Medicine

Course Outline
For
Diploma in Clinical Medicine &Surgery

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline for Community Health I

Code: **CHE 113**
Hours: 30
Credit: 3

Competence
This module is designed to enable the learner identify determinants of diseases in the community, plan community health education, design and deliver health promotion messages.

Module Outcomes

By the end of this module the learner should:

1. Identify determinants of health status in the community
2. Participate in the process of planning and implementation of Primary Health Care (PHC) and Community Based Health Care (CBHC activities.
3. Plan, organize and facilitate health education-related messages
4. designing of health promotion materials

Content Delivery

Week	Dates		Unit
	From	To	
Week 1:	**Introduction**		
Week 2:			Definition and approaches to community health
Week 3	**Community Health Strategy**		Community Health Strategies
Week 4	**Health promotion**		definitions, principles, Ottawa charter
Week 5:	**Health education**		, definitions, approaches
Week 6:			Planning for health education, health education topics
Week 7:			Methods of health education
Week 8:			Steps in carrying out health education
Week 9:			**CATS**
Week 10:	**PHC**		health for all 2000, definitions, characteristics
Week 11			Principles and concepts, elements
Week 12:			Millennium Development Goals, Sustainable Development Goals
Week 13:			CBHC, introduction,
Week 14:			Health promotion materials, health promotion messages
Week 15:			demonstrations
Week 16:			
Week 17:			Study week
Week 18:			**End of Semester Examinations**

Module Content

Introduction; community definition, WHO definition, types of communities, functions of community, community feeling, and dimension of community, functions as dimension of community, health and community systems. Health-definition of health, models of health, dimensions of health. Concepts of community health, purpose of community health, objectives of community health**.Health promotion**; definition, principles, illness prevention, levels of prevention, health restoration.Ottawa charter.**Health Education;** definition, aims and objectives,

health education approaches, steps in carrying out health education program, common topics of health education. Methods of health education, planning for health education and tips for health education. **Primary Health Care (PHC);** definition, characteristic of PHC, principles of PHC, Elements of PHC, MDG- concepts and definitions.SDGs. Vision 2030.**Community Based Health Care (CBHC)**; Introduction to Community Based Health Care and Community Health Strategy. **Health Promotion Materials;** teachingaids, posters, charts, videos, demonstrations, role plays.

Teaching Strategies

Interactive Lectures, Small Group Tutorials and Group Assignments.

Teaching/Learning Resources

Computer, Overhead Projector, LCD Projector, White Board Markers, Permanent Markers, White Board, Charts, 3D Pictures.

Assessment Strategies

Formative:Continuous Assessment Tests, Individual Assignments and Group Assignments***Summative:***End of Semester Examinations

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Signature: _____
Date: _____

Approved By: Name: _____
Signature: _____
Date: _____

SEMESTER II YEAR I

FIRST AID

Kenya Medical Training College
Department of Clinical Medicine

Course Outline
For
Diploma in Clinical Medicine & Surgery

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline for Human Anatomy II

Code: **HAT 126**
Hours: 60
Credit: **10**

Module Competence

This module is designed to enable learner acquire knowledge on body systems and special sense organs.

Module Outcomes

By the end of this module the learner should:

1. Demonstrate understanding of body systems.
2. Apply knowledge of special sense organscare.

Content Delivery.

Week	Dates		Unit
	From	To	
Week 1:			Nervous system
Week 2:			Nervous system
Week 3			Nervous system
Week 4			Nervous system
Week 5:			Nervous system
Week 6:			Endocrine system
Week 7:			Endocrine system
Week 8:			C.A.T
Week 9:			Endocrine system
Week 10:			Endocrine system
Week 11			Urinary system
Week 12:			Urinary system
Week 13:			Urinary system
Week 14:			Reproductive system
Week 15:			**Reproductive system**
Week 16:			Special senses organs
Week 17:			Special senses organs
Week 18:			End of semester examination.

Module Content

Nervous system; nervous tissue,structure, organization,neuron,neuroglia,gray matter,spinal cord and spinal nerves,meninges,internal anatomy of the spinal cord, endoneurium, perineurium,epineurium,rami,plexus,intercostal nerves,brain and cranial nerves,parts of brain,cranial meninges,brain blood flow,blood-brain barrier,medulla oblongata,pons,mid brain,reticula,formation,cerebellum,diencephalon,hypothalamus,epithalamus,cerebrum,limbic system,sensoryareas,motor areas, autonomic nervous system,preganglionic neurons,postgangalionic neurons,sympathetic ganglia,parasympathetic ganglia,ANS neurotransmitters,types, sensory,motor and integrative systems. **EndocrineSystem**;Location and structure of endocrine glands, hypothalamus and pituitary gland, thyroid gland,parathyroid gland,adrenal glands,pancreatic islets, pineal,gland, thymus, ovaries,testis and eicosanoids.**Urinary system**; macroscopic and microscopic features of kidney,uretersurinary bladder,urethra.**Reproductivesystem**;male reproductive systems: location, structure, (scrotum,testes,accessory sex glands,penis).Female reproductive system; location,structure (ovaries,uterine tubes, uterus,vagina,vulva and perineum, mammary glands.**Special senses organs(sensory);**eye, ear, tongue, nose.

Teaching Strategies

interactive lectures, small group tutorials, case studies, case scenarios, simulations and small group assignments

Teaching/Learning Resources

Laptop, Computer, Overhead projector, LCD projector, White board markers, Permanent Markers, White board, Charts,

Assessment Strategies;

Formative: Continuous assessment tests, individual assignments and group assignments

Summative: End of Semester Examination

References/Further Readings

Gerard,J.T and Bryan ,D.(2010)Principles of Anatomy and Physiology Intrnational. (16th Edition). New Jersey. USA.

Drake, R. L. Vogl, W. A. and Mitchell, A.W.M. (2005) *Grays' Anatomy for Student's*. Toronto, Ontario, Canada: Elsevier Churchill Livingstone.

Netter, F.H. (2010).Atlas of human Anatomy.(5th Ed).SaunderElsever Publishers. Philadelphia, USA.

Torslem, B.M.(2000). Pocket Atlas of Radiographic Anatomy.(2nd Edition). Elsevier Publishers, Thieme Stuttgart. Germany

Keith L.M and Anne,M.R.A. (2007). Clinically Oriented Anatomy.(2nd Edition). Amazon Books 530Walnut Street,Philadelphia PA 191O6, USA.

Brue, I., Victoria,H.O (2007). Integrated Anatomy and Embryology.Elsevier Publishers Ltd. (1st Edition).New York, USA..

Snell R.S.(2008). Clinical Anatomy by regions.(8th Edition). Elsevier Publishers Ltd. Philadelphia. USA.

Tixas,S.(2007). Atlas of surface palpation Anatomy of the neck,Trunk,Upper and Lower Limbs, (2ndEdition).Churchill Livingstone, Philadelphia, USA.

Prepared By: Name: _____
Signature: _____
Date: _____

Approved By: Name: _____

Signature: _____

Date: _____

KENYA MEDICAL TRAINING COLLEGE
DEPARTMENT OF CLINICAL MEDICINE

COURSE OUTLINE FOR MEDICAL PHYSIOLOGY II

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline for Medial Physiology II

Code: MEP 126
Hours: 60
Credit:06

Module Competence

The module is designed to equip the learner with knowledge to demonstrate understanding of normal human body functions in relation to diagnosis management of diseases

Learning Outcomes

By the end of this module, the learner shall be able to:

1. Describe the structural function and impulse transmission in nervous system
2. Describe functions in Special Senses
3. Describe the process of hormone production, regulation and effects on body organs.

4. Describe the reproductive system structure and their functions
5. Describe the urinary systems' role in urine formation- reabsorption, secretion and excretion.
6. Relate gastrointestinal tract structures to its functions

Content Delivery

Week	Dates		Unit
	From	**To**	
Week 1:			**CNS**-Organisation -blood supply ,CSF meninges and blood brain barrier,the brain, the spinal cord, neuron, functions of the neuron, action potential in neurons, synapse,
Week 2:			functions of the central nervous system, sensory receptors, peripheral nervous system, autonomic nervous system
Week 3			motor and integrative functions ;cortical control of motor functions cerebral blood flow ,intellectual functions, behavioural and motivational mechanism; states of brain activity, locomotion Embryology; developmental urogenital system
Week 4			**Sensory system;f**unctions of the skin, ear, eye, tongue, nose, general sensory receptors: pressure, temperatures, pain, proprioception and touch.
Week 5:			**Endocrine system**-Hormonal glands, hormone, production, composition, feedback mechanism in regulation hormonal glands, hormone, production,
Week 6:			composition, feedback mechanism in regulation, endocrine glands and target tissues,physiology of sex, ovarian cycle menstrual cycle, spermatogenesis
Week 7:			Oogenesis fertilization and implantationabnormalities of the endocrine system

Week 8:		**Reproductive system** - review structures, functions of the reproductive structures, role of reproductive hormones in males and females,
Week 9:		**CATs**
Week 10:		, menstrual cycle, menopause, andropause. **Urinary System;** review kidney structures and accessory organs
Week 11		blood supply to the kidney, functions of a nephronand other functions of the kidney- urine formation
Week 12:		pH maintenance electrolyte balance creatinine clearance and buffer systems concept of plasma clearance. **Gastro-intestinal system** - review structures
Week 13:		functions, enzymes, hormones, absorption of nutrients and feedback mechanism in the gastro-intestinal tract (GIT), accessory organs.
Week 14:		Revision
Week 15:		Study Week
Week 16:		
Week 17:		
Week 18:		**End of Semester Examinations**

Module Content

Nervous System –Organisation -blood supply ,CSF meninges and blood brain barrier,the brain, the spinal cord, neuron, functions of the neuron, action potential in neurons, synapse, functions of the central nervous system, sensory receptors, peripheral nervous system, autonomic nervous system, motor and integrative functions ;cortical control of motor functions cerebral blood flow ,intellectual functions, behavioural and motivational mechanism; states of brain activity, locomotion **Sensory system;f**unctions of the skin, ear, eye, tongue, nose, general sensory receptors: pressure, temperatures, pain, proprioception and touch.**Endocrine system**-Hormonal glands, hormone, production, composition, feedback mechanism in regulation, endocrine glands and target tissues,physiology of sex, ovarian cycle menstrual cycle, spermatogenesis Oogenesis fertilization and implantationabnormalities of the endocrine system**Reproductive system** - review structures, functions of the reproductive structures, role of reproductive hormones in males and females, menstrual cycle, menopause, andropause. **Urinary System;** review kidney structures and accessory organs, blood supply to the kidney, functions of a nephron, and other functions of the kidney- urine formation, ,PH maintainance electrolyte balance creatinine clearance and buffer systems concept of plasma clearance. **Gastro-intestinal system** - review structuresfunctions, enzymes, hormones, absorption of nutrients and feedback mechanism in the gastro-intestinal tract (GIT), accessory organs.

Learning Strategies

Lectures, demonstration, group discussions, individual assignments and case studies

Learning/teaching Resources

Laptop computer, projector, 3D pictures, videos, charts, white board and whiteboard markers

Assessment Strategies

Formative: CAT(s) accounts for 40% of the total marks

Summative: End of Semester Examinations accounts for 60% of the total marks

References/Further Readings

World Health Organization, (2010).Community Based Rehabilitation; CBR guidelines. Malta; WHO Press

Prepared By: Name: _____

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Date: _____

Approved By: Name: _____

Signature: _____

Date: _____

Kenya Medical Training College
Department of Clinical Medicine

Course Outline
For
Higher Diploma in Clinical Medicine &Surgery
(Clinical Methods 11)

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline for Clinical Methods

Code: **CLM 123**
Hours: 30
Credit: 3

Module Competence

Perform Genital urinary and neuromuscular systemic examination, perform diagnostic and therapeutic procedures, apply injection safety, infection prevention and control techniques.

Module Outcomes

By the end of this module, the learner should

1. Apply communication skills in taking comprehensive medical, paediatric and surgical histories

2. Perform physical examination – general and various systems (UGT and Neuro-musculo-skeletal)

3. Perform specific clinical diagnostic and therapeutic procedures

4. Apply principles of injection safety and infection prevention and control

Content Delivery

Week	Dates		Unit
	From	To	
Week 1:			**Genital –urinary system examination** Common signs and symptoms of GUT. Inspection of external genitalia,
Week 2:			Palpate and percuss lower abdomen; kidneys examination;
Week 3			Trans- illumination test and special examination; Urinalysis, HVS, Pelvic ultrasound, colposcopy
Week 4			**Neuro-musculoskeletal system examination** Nervous system,symptoms, higher centers, Cranial Nerves (I-XII),.
Week 5:			Motor function, sensory function, signs of meningeal irritation, ANS functions
Week 6:			Investigations and diagnostic procedures, (X - ray, CT Scan, MRI, Lumbar puncture).
Week 7:			Musculoskeletal; Common signs and symptoms, examination of muscles, joints and bones
Week 8:	Week 8 to week 13		**Diagnostic and therapeutic procedures**definitions, clinical procedures, documentation, patient feeding and infection prevention, isolation techniques, sterile techniques, surgical asepsis, patient ambulation, applying restrains, applying

		bandage, wound care, medication, and blood transfusion
Week 9:		**CATs,**
Week 10:		Endoscopy, gastroscopy, paracentesis, Thoracocentesis, radiological investigation, otoscopy, laryngoscopy, ophthalmoscopy, Venepuncture, throat swab; enema, colostomy care, catheterization, oxygen administration, oral/nasopharyngeal suction, tracheostomy, care/suctioning; care of patients with chest tube
Week 11		nasogastric intubation and uses, pre and post-operative care,
Week 12:		irrigation of the bladder, ear swabbing and syringing, eye swabbing and irrigation, care of unconscious patient; Biological and medical waste disposal
Week 13:		
Week 14:		**Injection safety, infection prevention and control** Principles of infection prevention and control;
Week 15:		Decontamination processes and sterilization;
Week 16:		Safe injection principles and procedures; waste segregation and disposal.
Week 17:		**Practicum –**Clinical assessment.
Week 18:		**End of Semester Examinations**

Module Content

Neuro-musculoskeletal system examination; nervous system,symptoms, higher centers, Cranial Nerves (I-XII), motor function, sensory function, signs of meningeal irritation, ANS functions. Investigations and diagnostic procedures, (X - ray, CT Scan, MRI, Lumbar puncture). Musculoskeletal; common signs and symptoms, examination of muscles, joints and bones.**Genital urinary system examination;** common signs and symptoms of GUT. Inspection of external genitalia, Palpate and percuss lower abdomen; kidneys examination; Trans- illumination test and special examination; Urinalysis, HVS, Pelvic ultrasound, colposcopy. **Introduction to diagnostic and therapeutic procedures**: definitions, clinical procedures, documentation, patient feeding and infection prevention, isolation techniques, sterile techniques, surgical asepsis, patient ambulation, applying restrains, applying bandage, wound care, medication, and blood transfusion. Diagnostic and therapeutic procedures*:* Endoscopy, gastroscopy, paracentesis, thoracocentesis, radiological investigation, otoscopy, laryngoscopy, ophthalmoscopy, venepuncture, throat swab; enema, colostomy care, catheterization, oxygen administration, oral/nasopharyngeal suction, tracheostomy, care/suctioning; care of patients with chest tube, nasogastric intubation and uses, pre and post-operative care, irrigation of the bladder, ear swabbing and syringing, eye swabbing and irrigation, care of unconscious patient; Biological and medical waste disposal**. Injection Safety, Infection Prevention and Control;** principles of infection prevention and control; Decontamination processes and sterilization; Safe injection principles and procedures; use of safety boxes, proper waste segregation and disposal. **Practicum (Skill slab and clinical placement) –** history taking, communication skills, examination of body systems, nursing skills, injection safety, infection prevention and control.

Teaching Strategies

interactivelectures, demonstrations, small group tutorials, group assignments, role play, virtual reality, e-learning.

Teaching/Learning Resources

Procedure manuals**,** Laptop / computer, LCD projector, white board markers, permanent markers, white board, Charts, 3D Pictures, videos, surgical instruments, manikins, models.

Assessment Strategies

Formative: CAT(s) accounts for 40% of the total marks

Summative: End of Semester Examinations accounts for 60% of the total marks

References/Further Readings

Glynn, M., Deake, W. M., and Hutchson R., (2012). Hutchison's Clinical Methods:
An integrated Approach to clinical practice.Edinburgh Elsevier latest edition.

Houghton A.R, Gray D. and Chamberlain, E.R. (2010).
Chamberlains Clinical signs and symptoms in Clinical Medicine. London, Hodder Arnold.

Lumley, J.S.P and Bailey H. (2001) Hamilton Baileys physical signs:
Demonstration of physical signs: in Clinical Surgery.

Macleod J. Douglas G. Nicol, E. F. and Robertson C. (2009).
Macleod's Clinical Examination Edinburg; Churchill Livingstone/ Elsevier

Tally N. J. and O' Conner, S. (2001). Clinical examination:
A Systemic Guide to physical diagnosis. Diagnosis, Oxford: Blackwell science.

Thomas J. and Mohaghan T. (2014) Oxford Hand book of clinical examination
and practical skills. Oxford University press.

Prepared By: Name: _____
Signature: _____
Date: _____

Approved By: Name: _____
Signature: _____
Date: _____

Kenya Medical Training College
Department of Clinical Medicine

Course Outline
For
Diploma in Clinical Medicine &Surgery

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline forPrinciples of Parasitology and Laboratory Techniques II

Code: **MPL 124**
Hours: 30
Credit: 3

Competence
Explain the mechanism by which parasites cause diseases in the human body, control and preventive measures of those diseases.

Outcomes

1. Classify protozoa
2. Apply concepts of laboratory investigations, methods of collecting specimen and use of laboratory equipment.

Content Delivery

Week	Dates		Unit
	From	To	
Week 1:			Introduction to protozoa
Week 2:			Amoebae
Week 3			Amoebae
Week 4			Amoebae
Week 5:			Flagellates
Week 6:			Flagellates
Week 7:			Flagellates
Week 8:			Flagellates
Week 9:			**CATs,**
Week 10:			Sporozoa
Week 11			Sporozoa
Week 12:			Sporozoa
Week 13:			Balantidium coli and Microsporidia
Week 14:			Introduction to laboratory techniques
Week 15:			Diagnostic procedures (investigations)
Week 16:			Methods of collection of specimen and use of equipment
Week 17:			Revision
Week 18:			**End of Semester Examinations**

Module Content

Protozoa; classification, modes of transmission, life cycles and prevention and control measures, protozoa (amoebae, flagellates, sporozoa, balantidium coli, microsporidia) **Introduction to laboratory techniques**: explain concepts, laboratory investigation, methods of collecting specimen and use of common laboratory equipment.

Teaching Strategies

interactive lectures, small group tutorials and small group assignments.

Teaching/Learning Resources

Computer, Overhead projector, LCD projector, white board markers, permanent markers, white board, illustration charts,

Assessment Strategies

Formative;Continuous assessment tests, individual assignments and group

assignments***Summative;***End of module examination

References/Further readings

Arora, D.R. (2010). *Medical parasitology*.3rd Ed. CBS Publishers & Distributors PVT.Ltd. New Delhi, India.

Chakraborty, P. (2013). *Textbook of MEDICAL PARASITOLOGY*.(2nd Edition). New Central Book Agency (P) Ltd. London, U.K.

Prepared By: Name: _____
Signature: _____
Date: _____

Approved By: Name: _____
Signature: _____
Date: _____

KENYA MEDICAL TRAINING COLLEGE
DEPARTMENT OF CLINICAL MEDICINE

COURSE OUTLINE FOR BASIC DIPLOMA COURSE

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline for Medical Microbiology II

Code: MEP116
Hours: 60
Credit: 6

Module CompetenceThis module is designed to enable the learner explain the mechanism by which microorganisms cause diseases in the human body.

Module Learning OutcomesBy the end of this module, the learner shall :

1. Outline the classification of the viruses, characteristics, mode of transmission, presentation, diagnosis, prevention and control measures.

Outline the classification of the fungi, characteristics, mode of transmission, presentation, diagnosis, prevention and control measures

Content Delivery

Week	Dates		Unit
	From	**To**	

Week 1:		**Viruses –**Viral /virionstructure,(relation to human cell penetration),HIV**viralstructure,c**lassification of viruses(DNA/RNA)
Week 2:		characteristics of viruses,cellpenetration,attachment,disease progression.
Week 3		Transmission;mode multiplication
Week 4		transmission, mode,multiplication
Week 5:		clinical presentation of various viral diseases
Week 6:		Diagnosis;investigation, prevention
Week 7:		control measures infections by viruses.
Week 8:		Cat
Week 9:		**Fungi -**Classification of fungi
Week 10:		characteristics of fungi
Week 11		transmission, clinical presentation
Week 12:		diagnosis, prevention and control measures of infections by fungi diagnosis, prevention and control measures of infections by fungi
Week 13:		Superficial mycoses and systemic mycoses and opportunistic mycoses.
Week 14:		Superficial mycoses and systemic mycoses and opportunistic mycoses.
Week 15:		Superficial mycoses and systemic mycoses and opportunistic mycoses.
Week 16:		Revision
Week 17:		Study Week
Week 18:		**End of Semester Examinations**

Module ContentModule content

Viruses - Classification of viruses, characteristics of viruses, transmission, clinical presentation, diagnosis, prevention of and control measures infections by viruses. DNA and RNA viruses, HIV.**Fungi -**Classification of fungi, characteristics of fungi, transmission, clinical presentation, diagnosis, prevention and control measures of infections by fungi.Superficial mycoses and systemic mycoses and opportunistic mycoses.

Learning Strategies

interractiveLectures, demonstration, group discussions, individual assignments and case studies

Learning/teaching Resources

Laptop computer, projector, 3D pictures, videos, charts, white board and whiteboard markers

Assessment Strategies

Formative: CAT(s) accounts for 40% of the total marks

Summative: End of Semester Examinations accounts for 60% of the total marks

References/Further Readings

World Health Organization, (2010).Community Based Rehabilitation; CBR guidelines. Malta; WHO Press

Prepared By: Name: _____

Signature: _____

Date: _____

Approved By: Name: _____

Signature: _____

Date: _____

Kenya Medical Training College
Department of Clinical Medicine

Course Outline
For
Higher Diploma in Clinical Medicine &Surgery
(General Pathology II)

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline for General Pathology II

Code: **GEP123**
Hours: 30
Credit: 3

Pre-requisite (s): KSCE with Biology, chemistry, physics or Mathematics, English

Competence
To enable the learner to understand the disorders of body fluid circulation, genetic disease disorders and body immunopathology.

Outcomes
By the end of this module the learner should:

1. Explain normal fluid and electrolyte fluid compartment.
2. Explain the causes and effects of impaired circulation and fluid-electrolyte imbalance.
3. Classify the genetic disorders
4. Explain the pathogenesis of the immune system disorders.

Content Delivery

Week	Dates		Unit
	From	To	
Week 1:			Body fluids and electrolytes; normal fluid and electrolytes in the compartment
Week 2:			Disorders of fluid and electrolytes imbalance
Week 3			Causes of impaired fluid and electrolyte
Week 4			Clinical types of edema
Week 5:			Shock and types
Week 6:			Clinical importance of shock
Week 7:			Manifestations of shock
Week 8:			General principles of shock management
Week 9:			**CATs,**
Week 10:			Review of cell structure, division and DNA
Week 11			Classification of genetic disorders
Week 12:			Chromosomal disorders
Week 13:			Clinical syndromes and their pathophysiology
Week 14:			Immune disorders and immune response
Week 15:			
Week 16:			Hypersensitivity reactions
Week 17:			Autoimmune diseases and immunodeficiency
Week 18:			**End of Semester Examinations**

Module Content

Normal circulation: Review of normal fluid and electrolytes in the compartments. Impaired fluids and electrolytes: causes, disorders; types of shock, edema and effects. **Genetic disorders**: Review of cell and DNA, classification, chromosomal disorders, clinical syndromes and their pathophysiology. Immune disorders: immune response, hypersensitivity reactions, autoimmune diseases and immunodeficiency.

Teaching Strategies

Lectures and tutorials .

Teaching/Learning Resources

Laptop computer, overhead projector, LCD projector, white board markers, permanent markers, white board, Charts, 3D Pictures.

Assessment Strategies

Formative: CAT(s) accounts for 40% of the total marks

Summative: End of Semester Examinations accounts for 60% of the total marks

References/Further Readings

Kishasha M (2016). *Textbook of human pathology*. 1st edition, Acrodile publishers, Nairobi, Kenya.

Harsh M (2014).*Textbook of Pathology*.1st edition. New Delhi: Jaypee Brothers, Medical Pub, India

NitonC,& Muir (2014). *Textbook of Pathology*.15th edition, New Delhi.Jaypee Brothers, India

Prepared By: Name: _____
Signature: _____
Date: _____

Approved By: Name: _____
Signature: _____
Date: _____

Kenya Medical Training College
Department of Clinical Medicine

Course Outline
For
Diploma in Clinical Medicine & Surgery

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course outline for Biochemistry II

Code:	**MBC 203**
Hours:	**30**
Credit:	**03**

Pre-requisite:- Human Anatomy, Human Physiology, Medical Pathology and Biochemistry I.

Module Competence: This module is designed to enable the learner to apply knowledge of medical biochemistry in clinical practice.

Module Outcomes

By the end of this module the learner should:

1. Describe fat metabolism and disorders

2. Discuss carbohydrate metabolism and disorders
3. Utilize the knowledge of biochemistry in ordering and interpretation of clinical laboratory tests.

Content Delivery

Week	Dates		Unit
	From	To	
Week 1:	**Enzymes**		Enzyme Classification and physiological functions
Week 2:			Mechanism of action; factors influencing action of enzymes
Week 3			Mechanism of action; factors influencing action of enzymes
Week 4	**Carbohydrate metabolism**		Metabolism-Glycolysis, gluconeogenesis, glyconeogenesis
Week 5:	**Carbohydrate Metabolism disorders**		Metabolism-Glycolysis, gluconeogenesis, glyconeogenesis TCA cycle, Krebs cycle-proteins, CHO, Lipid entry Krebs cycle-physiological roles Krebs cycle-products
Week 6:	**Lipids metabolism**		Essential fatty acids, cholesterol, high and low density lipoproteins, properties
Week 7:			
Week 8:			
Week 9:	**Disorders of lipids**		Metabolic pathways-lipolysis
Week 10:			
Week 11			
Week 12:			
Week 13:	**Clinical biochemistry-**		Indications, procedure and normal values of liver function tests, renal function tests, fasting blood sugar, glucose tolerance test, urinalysis, lipid profile
Week 14:			
Week 15:			
Week 16:			
Week 17:			
Week 18:			

Module Content

Lipids metabolism and disorders - Lipid **metabolism, obesity, ischaemic heart diseases. Carbohydrate metabolism and disorder -** Carbohydrate metabolism, diabetes mellitus.**Clinical biochemistry**- Indications, procedure and normal values of liver function tests, renal function tests, fasting blood sugar, glucose tolerance test, urinalysis, lipid profile,

Teaching Strategies; Lectures, tutorials and group discussions.

Teaching/Learning Resources: Laptop computer, overhead projector, LCD projector, white board markers, permanent markers, white board, Charts, 3D Pictures.

Assessment Strategies;

Formative; Continuous assessment tests, individual assignments and group assignments

Summative; End of module examination

References and Further readings;

Nelson D. And Cox M. (2005) Lehninger's Principles of Biochemistry (4th Edition). Amazon, London, UK.

Murray RK et al (2006) Harper's illustrated biochemistry 28th Edition, the McGraw-Hill Companies

Chatterjea M.N., Rana S. (2015). Text book of Medical Biochemistry.(8th Edition).Jaypee Brothers Publishers LTD, Punjab, India.

e-resources; case studies, case scenarios, simulations, softwares

Prepared By: Name: _____
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Date: _____

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Signature: _____
Date: _____

KENYA MEDICAL TRAINING COLLEGE
DEPARTMENT OF CLINICAL MEDICINE

COURSE OUTLINE FOR DIPLOMA IN CLINICAL MEDICINE AND SURGERY

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline for Pharmacology and Therapeutics II

Code:PTH 123
Hours: 30
Credit: 3

Competence

Manage patients effectively using antimicrobial agents.

Outcomes

1. Demonstrate understanding of antibacterial drugs and their uses
2. Treat fungal infections using the various antifungal drugs
3. Prescribe antiviral agents appropriately
4. Demonstrate understanding of the various topical agents and antiseptics, and their uses.

Content Delivery

Week	Dates	Unit

	From	To	
Week 1:			**Antibacterial Agents;**introduction to antimicrobials – classification of antimicrobials, mechanisms of action of antimicrobials, principles of antimicrobial treatment, problems associated with antimicrobial use, rational use of antimicrobials.
Week 2:			**Antibacterial Agents;** Drugs that inhibit cell wall synthesis: beta lactam antimicrobials – penicillins
Week 3			Cephalosporins, carbapenems, monobactams
Week 4			Drugs that inhibit nucleic acid synthesis - sulphonamides&trimethoprim, nitroimidazoles, quinolones
Week 5:			Drugs that inhibit protein synthesis – aminoglycosides, chloramphenicol, clindamycin, fucidic acid
Week 6:			Drugs that inhibit protein synthesis – macrolides, tetracyclines.
Week 7:			Antimycobacterial drugs – anti-tubercular drugs, treatment of tuberculosis.
Week 8:			Antimycobacterial drugs – anti-leprosy drugs, treatment of leprosy.
Week 9:			**CATs**
Week 10:			**Antifungal Agents;**classification and mechanisms of action,polyenes – amphotericin B, nystatin; heterocyclic benzfuran (griseofulvin).
Week 11			**Antifungal Agents;**antimetabolites (flucytosine),imidazoles (ketoconazole, clotrimazole), triazoles (fluconazole, itraconazole).
Week 12:			**Antifungal Agents;**echinocandins (caspofungin, anidulafungin, micafungin),allylamines (terbinafine), other topical antifungals.
Week 13:			**Anti-viralAgents;**introduction, classification, antiherpes virus drugs, anti-influenza virus drugs, anti-cytomegalovirus drugs,interferons.
Week 14:			Antiretroviral drugs; classification, sites and mechanisms of action, goals and principles of antiretroviral therapy

Week 15:			Antiretroviral drugs;approach to antiretroviral therapy (protocols), HIV standard regimens, dosages and adverse effects of ARVs.
Week 16:			**Topical Agents and Antiseptics;**classification,ophthalmic drugs (antibacterial preparations, mydriatics, miotics, anti-allergic preparations),dermatological preparations (antipruritics, anti-ectoparasitic agents, antifungals, keratolytic agents, topical antibiotics and antiseptics, topical steroids).
Week 17:			Study Week
Week 18:			**End of Semester Examinations**

Module Content

Antibacterial Agents; introduction to antimicrobials (classification of antimicrobials, mechanisms of action of antimicrobials, principles of antimicrobial treatment, problems associated with antimicrobial use, rational use of antimicrobials), drugs that inhibit cell wall synthesis (beta lactam antimicrobials – penicillins, cephalosporins, carbapenems, monobactams), drugs that inhibit nucleic acid synthesis (sulphonamides& trimethoprim, nitroimidazoles, quinolones), drugs that inhibit protein synthesis (aminoglycosides, chloramphenicol, clindamycin, fucidic acid, macrolides, tetracyclines), antimycobacterial drugs (anti-tubercular drugs, treatment of tuberculosis, anti-leprosy drugs, treatment of leprosy). **Antifungal Agents;** classification and mechanisms of action, polyenes (amphotericin B, nystatin), heterocyclic benzfuran (griseofulvin),antimetabolites (flucytosine), imidazoles (ketoconazole, clotrimazole), triazoles (fluconazole, itraconazole),echinocandins (caspofungin, anidulafungin, micafungin), allylamines (terbinafine), other topical antifungals. **Anti-viral Agents;** introduction, classification, anti-herpes virus drugs, anti-influenza virus drugs, anti-cytomegalovirus drugs, interferons, antiretroviral drugs (classification, sites and mechanisms of action, goals and principles of antiretroviral therapy, approach to antiretroviral therapy (protocols), HIV standard regimens, dosages and adverse effects of ARVs). **Topical Agents and Antiseptics;** classification, ophthalmic drugs (antibacterial preparations, mydriatics, miotics, anti-allergic preparations),dermatological preparations (antipruritics, anti-ectoparasitic agents, antifungals, keratolytic agents, topical antibiotics and antiseptics, topical steroids).

Teaching Strategies

Interactive Lectures, Small Group Assignments, Small Group Discussions

Teaching/Learning Resources

Computer, LCD Projector, White Board Markers, Permanent Markers, White Board, Charts, Chalk, Chalk Board.

Assessment strategies

***Formative*:** Continuous Assessment Tests, Individual Assignments and Group Assignments

***Summative*:** End of Semester Examination

References/Further Readings

6. Bennett, P., & Brown, M. (2009). *Clinical Pharmacology.* London: Churchill Livingstone, ELSEVIER.

7. Katzung, B. G., & Trevor, A. J. (2012). *Basic & Clinical Pharmacology.* London: LANGE.

Mary, J. (2008). *Pharmacology,* Lippincott Williams and Wilkins

8. Njau, E. (2014). *Pharmacology and Therapeutics.* Nairobi: Amref.

9. Rang, H., Dale, M., Ritter, J., Flower, R., & Henderson, G. (2012). *Rang and Dale`s Pharmacology.* London: Churchill Livingstone, ELSEVIER.

Satoskar, R. (2007). *Pharmacology and Pharmacotherapeutics* 6th edition.

10. Tripathi, K. (2013). *Essentials of Medical Pharmacology.* 4th edition. New Delhi: Jaypee.

Prepared by: Name: _____

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Signature: _____

Date: _____

Kenya Medical Training College
Department of Clinical Medicine

Course Outline
For
Diploma in Clinical Medicine & Surgery

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline for Behavioural Sciences

Code: **BES 122**
Hours: 22
Credit: 2

Pre-requisite; Communication Skills
Competence
This module is designed to enable the learner apply principles of behavioural sciences in health care.

Module Outcomes

By the end of this module the learner should:

1. Apply principles and concepts of sociology and anthropology in health practice
2. Carry out counseling in health care practice

Content Delivery

Week	Dates		Unit
	From	To	
Week 1:			Introduction to sociology and anthropologyDefinitions and terminologies, Historical background of sociology, and anthropology, branches of behavioural sciences, relevance of behavioural sciences in health, comparisons of sociology and anthropology, Early background of Sociology, branches of sociology;
Week 2:			Historical background of sociology, and anthropology
Week 3			Branches of sociology
Week 4			Group dynamics
Week 5:			Basic social institution
Week 6:			Religion
Week 7:			Culture
Week 8:			Counselling concepts; Definition, concept of counseling, types of counseling, characteristics of a good counselor; counseling skills, counseling process- GATHER, SOLER. interventions and management
Week 9:			**CATs**
Week 10:			

Module Content

Introduction to sociology and anthropology; Definitions and terminologies, Historical background of sociology, and anthropology, branches of behavioural sciences, relevance of behavioural sciences in health, comparisons of sociology and anthropology, Early background of Sociology, branches of sociology, social change- definition and factors that facilitate change. Groups dynamics, process of instituting social change. Basic social institutions family, Government and political institutions, Economic institutions, Educational institutions and Religion: definition types and functions. Illness and illness behaviour, sickness, Early background and branches of anthropology, Culture and Cultural effects on health, Sickness behaviours, disease, hospitalization and hospitalization effects and personal motives. Human needs - Abraham Maslow's hierarchy of needs and other theories; frustration and defense mechanisms. **Counseling;** Definition, concept of counseling, types of counseling, characteristics of a good counselor; counseling skills, counseling process- GATHER, SOLER. interventions and management.

Teaching Strategies

Lectures, tutorials and group assignments, case Studies, case scenarios, simulations

Teaching/Learning Resources

Laptop computer, overhead projector, LCD projector, white board markers, permanent markers whiteboard and charts

Assessment Strategies

Formative; Continuous assessment tests, individual assignments and group assignments

Summative; End of module examination

References/Further readings;

Feldman R.S. (2005). Essentials of understanding psychology, (6th Ed,) University of Massachusetts-Amherst, McGraw-hall (ISBN0072965037)

SantrockJ.W(2004) lifespan development,9th Ed, University of Texas, Dallas McGraw-hall (ISBN0072965037)

Schuster C.S &Smith-Ashborn S. (1992) the process human development: a holistic life span Approach

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Signature: _____
Date: _____

Kenya Medical Training College
Department of Clinical Medicine

Course Outline
For
Diploma in Clinical Medicine &Surgery

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline for Community Health II

Code: **CHE 123**
Hours: 30
Credit: 3

Module Competence

This module is designed to enable the learner identify determinants of diseases in the community, plan community health education, design and deliver health promotion messages.

Module Outcomes

By the end of this module the learner should:

1. Carry out community nutrition assessment and implement nutritional program in the community

2. Identify and assess the various factors that influence health in relation to environment and housing, as well as recommending hygienic methods in food handling, storage and water supply.

Content Delivery

Week	Dates		Unit
	From	To	
Week 1:			Nutrition, introduction, food groups
Week 2:			Common nutritional disorders
			Nutritional disorders, prevention and controls
Week 4			Diet for special groups
Week 5:			Video, various food classes, charts, posters
Week 6:			Introduction environmental health, definitions, types of environment.
Week 7:			Pests and rodents control
Week 8:			Pollution, sources and its control
Week 9:			**cats**
Week 10:			Waste managements and housing, definitions, types, disposal, sewage, treatment
Week 11			Housing, patterns, good housing, diseases associated with housing
Week 12:			Water supply and food hygiene, definitions, sources, protection, sampling, treatment, storage
Week 13:			Food hygiene, definition, handling, storage, spoilage, hygiene, principles, common poisonous foods, milk and milk products,
Week 14:			Public Health Act (Cap 242)
Week 15:			Field trips
Week 16:			Field trips
Week 17:			Study week
Week 18:			**End of Semester Examinations**

Module content

Human Nutrition; Introduction, food groups, common nutritional disorders, prevention and control, Diet for special groups.**Introduction to environmental health;** definitions, types of environment, factors influencing the environment, pest and rodents control, Pollution,sources of pollution and its control.**Waste management and housing;** Definition, types of waste, disposal methods, sewage treatment, Housing,definitions, house patterns in the community, characteristics of a good house, diseases associated with housing. **Water supply and food hygiene;** definition, sources, protection, sampling, treatment, storage, Water borne diseases, food

Teaching Strategies

Interactive Lectures, Small Group Tutorials and Group Assignments.

Teaching/Learning Resources

Computer, Overhead Projector, LCD Projector, White Board Markers, Permanent Markers, White Board, Charts, 3D Pictures.

Assessment Strategies

Formative:Continuous Assessment Tests, Individual Assignments and Group Assignments***Summative:***End of Semester Examinations

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Signature: _____
Date: _____

Approved By: Name: _____
Signature: _____
Date: _____

Kenya Medical Training College
Department of Clinical Medicine
Course Outline
For
Diploma in Clinical Medicine &Surgery
(Health Systems management I)

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline for Health Systems Management I

Code: **HSM213**
Hours: 30
Credit: 3

Competence
To enable the learner manage health services.

Outcomes

1. Explain concepts, roles and functions of leadership and Management
2. Explain the organization of health care services
3. Appreciate the role of human resource management for effective health care service delivery
4. Demonstrate effective communication within healthcare organizations
5. Apply principles of commodity and supplies management

Content Delivery

Week	Dates		Unit
	From	To	
Week 1:			**Introduction to leadership and management;** definitions; importance of studying management; historical development of management and concepts, theories,
Week 2:			principles and functions of management; differentiate between leadership and management;
Week 3			qualities of a leader and styles of leadership,roles,skills
Week 4			organizational behaviour and group dynamics, definition of mission and vision; importance of personal and organizational missions and vision statements
Week 5:			**organization of health care services;** organization structure: purpose, types, functions, organizational structure of the health care system
Week 6:			structures, functions, health services delivery; levels of service, health services at each level, actors, cadres, referral system in Kenya.
Week 7:			**resource management**; concepts, principles, practices in human resource management;
Week 8:			recruitment, orientation, deployment performance management, counselling and coaching, motivation, work climate
Week 9:			**CATs,**
Week 10:			conflict resolution; grievances; code of regulation, managing change, human resource development; cycle, continuous professional development, job description, job analysis,

Week 11		professionalism and work ethics, medico – legal issues, occupational hazards, workman compensation act, disciplinary process; decision – making, planning meetings
Week 12:		. **Communication and networking;** basics of effective communication, effective communication skills, public speaking, report writing
Week 13:		networking, advocacy, negotiation partnership, inter/intra-sectoral collaboration, conducting meetings.
Week 14:		. **Commodity and supplies management;** commodity management cycle: selection, procurement, distribution, use and disposal
Week 15:		inventory management procedures, procurement procedures,
Week 16:		ethical and legal implications in commodity and supplies management.
Week 17:		Study week
Week 18:		**End of Semester Examinations**

Module Content

Introduction to leadership and management; definitions; importance of studying management; historical development of management and concepts, theories, principles and functions of management; differentiate between leadership and management; qualities of a leader and styles of leadership. organizational behaviour and group dynamics, definition of mission and vision; importance of personal and organizational missions and vision statements **organization of health care services;** organization structure: purpose, types, functions, organizational structure of the health care system; structures, functions, health services delivery; levels of service, health services at each level, actors, cadres, referral system in Kenya. **human resource management**; concepts, principles, practices in human resource management; recruitment, orientation, deployment performance management, counselling and coaching, motivation, work climate, conflict resolution; grievances; code of regulation, managing change, human resource development; cycle, continuous professional development, job description, job analysis, professionalism and work ethics, medico – legal issues, occupational hazards, workman compensation act, disciplinary process; decision – making, planning meetings. **Communication and networking;** basics of effective communication, effective communication skills, public speaking, report writing, networking, advocacy, negotiation partnership, inter/intra-sectoral collaboration, conducting meetings. **Commodity and supplies management;** commodity management cycle: selection, procurement, distribution, use and disposal, inventory management procedures, procurement procedures, ethical and legal implications in commodity and supplies management.

Teaching Strategies

1. Interactive lecture
2. Small groups discussions
3. Power point presentation
4. E-learning
5. Problem based learning
6. Study guides

12.6. Teaching / Learning Resources

Text books, study guides, journals , internet, LCD Projectors, Laptops , white board, whiteboard markers,

12.7. Assessment strategies

1. ***Formative;*** continuous assessment tests, clinical assessment, random tests, end of semester examination, etc.
2. ***Summative;*** OSCE, Clinical assessments, logbooks, research defense, FQE.

References/Further Readings

Kenya Medical Training College
Department of Clinical Medicine

Course Outline
For
Diploma in Clinical Medicine &Surgery
(Research)

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline forResearch

Module 25: Research

Code:	**RES 106**
Hours:	**60**
Credit:	**06**

Pre-requisite:-Introduction to basic principles of research

Module Competence: This module is designed to enable the learner to acquire knowledge and skills to conduct scientific research.

Module Outcomes

By the end of this module the learner should:

1. Demonstrate understanding of the concept of research and its application.
2. Apply knowledge and skills of research process and methodology in proposal writing.
3. Apply knowledge on basic statistics.
4. Conduct submit research dissertation.

Content Delivery

Week	Dates		Unit
	From	To	
Week 1:	**Concepts of research**		Definitions of research, research types**,** purposes of research,designs, types**,** designs, methods
Week 2:			types**,** designs, methods advantages and disadvantages of each of the methods and designs and methods. When are they used
Week 3	**Research process**		principles of research.
Week 4			, identification, prioritization of research problem, hypothesis, research questions
Week 5:			literature review, referencing, citation
Week 6:			methodology and protocol development, , instrument development, sampling procedures, data collection, processing, analysis, interpretation, and
Week 7:			presentation and report writing
Week 8:			CAT
Week 9:	**Basic statistics**		nomenclature, health data gathering,
Week 10:			birth rates, morbidity rates, mortality rates, descriptive and Inferential statistics
Week 11			descriptive and Inferential statistics
Week 12:			descriptive and Inferential statistics
Week 13:			descriptive and Inferential statistics
Week 14:			descriptive and Inferential statistics

Week 15:	
Week 16:	
Week 17:	Study week
Week 18:	**End of Semester Examinations**

Module Content

Concepts and purpose of research; types**,** designs, methods.**Research process;** principles of research methodology and protocol development, identification, prioritization of research problem, hypothesis, research questions, literature review, referencing, citation, instrument development, sampling procedures, data collection, processing, analysis, interpretation, and presentation and report writing. **Basic statistics** nomenclature, health data gathering, birth rates, morbidity rates, mortality rates, descriptive and Inferential statistics. **Research publication;**

Teaching Strategies; Lectures, tutorials and group discussions.

Teaching/Learning Resources:

Laptop computer, overhead projector, LCD projector, white board markers, permanent markers, white board, Charts, 3D Pictures.

Assessment Strategies;

Formative; Continuous assessment tests, individual assignments and group assignments
Summative; End of module examination

References/Further Readings;

Newmann L. (2008). Social Research Methods: Qualitative Approaches. (2nd Edition). Aryl and Bacon Publishers
Baker D. J. P. (2008). Practical Epidemiology.(1st Edition). London, UK. ELBS
Mugenda O. M. (2007). Research Methods, Qualitative and Quantitative Approaches. (2nd Edition). ACTS Press
Rao S. (2006). Introduction to Biostatistics and Research Methods.(2nd Edition) Jaypee brothers Publishers
Kothari C.R., (2004). Research Methodology: Methods and Techniques.(1st Edition). New Age Publishers

e-resources; case studies, case scenarios, simulations, softwares

Nyarango, P., Nordberg, E. Liambila (2005): *Health Planning and Management for Health Care managers in Developing Countries* (2nd Edition).(Manuscript, edited by, W.N; OnyayoS, :Nangami, M.)

Sullivan, Eleanor J., and Phillip J. Decker.*Effective Leadership and Management in Nursing.* 4th ed. Menlo Park, CA: Addison Wesley Nursing, 1997.

Tim Hannagan(2011).management concepts and practices. 5th edition Pearson Education Gate Harlow England

Weaver, C. A, Bell, Kim, G.R. and Kiel, J.M. (2016), Health care Information.(Editors).E-book.

Wolper, L.F. (2010), Health Care administration managing delivery. E-book. Jones and Barttlet publishers

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Date: _____

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Signature: _____
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Kenya Medical Training College
Department of Clinical Medicine
Course Outline
For
Diploma in Clinical Medicine &Surgery
(Health statistics)

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline for Health Statistics

Code: **HST 213**
Hours: 30
Credit: 3

Competence

This module is designed to enable the learner in apply principles of statistics in health care services.

Module Outcomes

By the end of this module the learner should:

1. Demonstrate understanding of the history and application of statistics in health care
2. Apply measures of central tendency in data analysis
3. Apply measures of dispersion in data analysis
4. Categorize data effectively
5. Apply various approaches in data analysis and presentation

Content Delivery

Week	Dates		Unit
	From	To	
Week 1:			Introduction to statistics; Definitions, history, characteristics of the various statistics, types, application of statistics,
Week 2:			Scales of Measurement, Nominal, ordinal, interval, ratio, scale
Week 3			Measures of Central Tendency; Calculation, interpretation, grouped data, ungrouped data, mode, median, and mean
Week 4			Measures of dispersion; range, inter-quartile range, semi inter-quartile range
Week 5:			Standard deviation, variance, Percentiles, Skewness.
Week 6:			Statistical Data; Primary and secondary, Numerical and categorical,
Week 7:			Grouped and ungrouped, Vital statistics, Calculation of demographic rates.
Week 8:			
Week 9:			**CATs,**
Week 10:			Data analysis and presentation; Introduction to data analysis, interpretation and presentation.
Week 11			
Week 12:			
Week 13:			
Week 14:			
Week 15:			
Week 16:			
Week 17:			Study week
Week 18:			**End of Semester Examinations**

Module Content

Introduction to statistics; Definitions, history, characteristics of the various statistics,types, application of statistics, Scales of Measurement,Nominal, ordinal, interval, ratio, scale. **Measures of Central Tendency;** Calculation, interpretation, grouped data, ungrouped data, mode, median, and mean.**Measures of dispersion;** range, inter-quartile range, semi inter-quartile range, Standard

deviation, variance, Percentiles, Skewness.**Statistical Data;** Primary and secondary, Numerical and categorical, Grouped and ungrouped, Vital statistics, Calculation of demographic rates.**Data analysis and presentation;** Introduction to data analysis, interpretation and presentation.

Teaching Strategies
Inter active lectures, small group tutorials and group assignments presentations

12.6. Teaching / Learning Resources

Text books, study guides, journals, internet, LCD Projectors, Laptops , white board, whiteboard markers,

12.7. Assessment strategies

3. ***Formative;*** continuous assessment tests, clinical assessment, random tests, end of semester examination, etc.
4. ***Summative;*** OSCE, Clinical assessments, logbooks, research defense, FQE.

References/Further Readings

Afubwa,S.O&Mwanthi, M.A. (2014) *Environmental Health and Occupational health & Safety*. Nairobi: A crocodile Publishing Ltd.

Tranter, M. (2004): Occupational Hygiene and Risk Management. Allen &Unwin.

Lewis, J. &Thormbory,G (2006).Employment Law and Occupational Health: A practical Handbook, Blackwell

Staren S. Sadhra,K.G.R (1999). Occupational Health risk assessment Occupational & Environmental Medicine, 4th Edition,

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Signature: _____
Date: _____

KENYA MEDICAL TRAINING COLLEGE
DEPARTMENT OF CLINICAL MEDICINE
(Pharmacology and therapeutics III)

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline for Pharmacology and Therapeutics III

Code: PTH 213
Hours: 30
Credit: 3

Competence

Demonstrate understanding of the uses of autacoid drugs and to utilize specific drugs to manage digestive and respiratory system conditions.

Outcomes

1. Demonstrate understanding of autacoids and their uses
2. Prescribe the various drugs for digestive system diseases effectively
3. Manage respiratory system conditions appropriately with drugs

Content Delivery

Week	Dates		Unit
	From	**To**	
Week 1:			**Autacoids;** definition, actions of autacoids, classification of autacoids, amine autacoids (histamine, 5-Hydroxytryptamine/serotonin)
Week 2:			Lipid-derived autacoids; eicosanoids (prostaglandins, leukotrienes), platelet activating factor
Week 3			Peptide autacoids; bradykinins, angiotensin.
Week 4			**Drugs Acting on the Digestive System;** classification, drugs used in peptic ulcer disease (antacids, H2 receptor antagonists, proton pump inhibitors,prostaglandin analogues, selective antimuscarinic chelate complexes),
Week 5:			**Drugs Acting on the Digestive System;** antispasmodics and drugs affecting gut motility
Week 6:			**Drugs Acting on the Digestive System;** emetics, anti-emetics.
Week 7:			**Drugs Acting on the Digestive System;** antidiarrhoeal drugs
Week 8:			**Drugs Acting on the Digestive System;** laxatives and bowel cleansing solutions, local preparations (anal and rectal preparations)
Week 9:			**CATs**
Week 10:			**Drugs Acting on the Digestive System;** nutrients preparations (IV fluids and feeds, vitamins).
Week 11			**Drugs Acting on the Respiratory System;** classification, preparations for cough (suppressants, expectorants, mucolytics)
Week 12:			Drugsfor bronchial asthma; bronchodilators (α- and β-adrenoreceptors, selective β_2 stimulants)
Week 13:			Compound bronchodilator preparations
Week 14:			Drugs for bronchial asthma; corticosteroids and mast cell stabilizers, inhaler devices and nebulizers
Week 15:			Pulmonary surfactants and oxygen
Week 16:			Antihistamines (sedating and non-sedating), anti-allergic drugs.

Week 17:			Study Week
Week 18:			**End of Semester Examinations**

Module Content

Autacoids; definition, actions of autacoids, classification of autacoids, amine autacoids, lipid-derived autacoids, peptide autacoids, cytokines, eicosanoids, bradykinins.**Drugs Acting on the Digestive System;** classification, drugs used in peptic ulcer disease (antacids, H2 receptor antagonists, proton pump inhibitors,prostaglandin analogues, selective antimuscarinic chelate complexes),antispasmodics and drugs affecting gut motility, antidiarrhoeal drugs, laxatives and bowel cleansing solutions, nutrients preparations (IV fluids and feeds, vitamins),local preparations (anal and rectal preparations), emetics, anti-emetics. **Drugs Acting on the Respiratory System;** classification, preparations for cough (suppressants, expectorants, mucolytics), drugs for bronchial asthma (bronchodilators (α- and β-adrenoreceptors, selective β_2 stimulants, compound bronchodilator preparations), corticosteroids and mast cell stabilizers; inhaler devices and nebulizers), pulmonary surfactants and oxygen, antihistamines (sedating and non-sedating), anti-allergic drugs.

Teaching Strategies

Interactive Lectures, Small Group Assignments, Small Group Discussions

Teaching/Learning Resources

Computer, Overhead Projector, LCD Projector, White Board Markers, Permanent Markers, White Board, Charts, Chalk, Chalk Board.

Assessment Strategies

***Formative*:** Continuous Assessment Tests, Individual Assignments and Group Assignments

***Summative*:** End of Semester Examination

References/Further Readings

11. Bennett, P., & Brown, M. (2009). *Clinical Pharmacology.* London: Churchill Livingstone, ELSEVIER.

12. Katzung, B. G., & Trevor, A. J. (2012). *Basic & Clinical Pharmacology.* London: LANGE.

Mary, J. (2008). *Pharmacology,* Lippincott Williams and Wilkins

13. Njau, E. (2014). *Pharmacology and Therapeutics.* Nairobi: Amref.

14. Rang, H., Dale, M., Ritter, J., Flower, R., & Henderson, G. (2012). *Rang and Dale`s Pharmacology.* London: Churchill Livingstone, ELSEVIER.

Satoskar, R. (2007). *Pharmacology and Pharmacotherapeutics* 6th edition.

15. Tripathi, K. (2013). *Essentials of Medical Pharmacology.* 4th edition. New Delhi: Jaypee.

Prepared by: Name: _____

Signature: _____

Date: _____

Approved by: Name: _____

Signature: _____

Date: _____

Kenya Medical Training College
Department of Clinical Medicine
Course Outline
For
Higher Diploma in Clinical Medicine &Surgery
(Paediatrics and Child Health I)

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline for Paediatrics and Child Health I

Code: **PCH 216**
Hours: 60
Credit: 6

Pre-requisites: Basic sciences, (Human Physiology, Anatomy, General pathology. Pharmacology, Clinical methods, Parasitology, Biochemistry).

Module Competence

Diagnose and manage childhood diseases and conditions.

Outcomes

1. Diagnose and manage neonatal conditions
2. Apply principles of growth and development in diagnosis and management of childhood illnesses and conditions.

3. Diagnose and Manage Malnutrition and nutritional disorders

4. Carry out immunization and manage Immunizable diseases

5. Manage emerging and re-emerging paediatric tropical diseases and HIV

5. Apply the principles of IMNCI and ETAT plus in the management of common childhood illnesses

6. Diagnose and manage respiratory conditions and diseases.

Content Delivery

Week	Dates		Unit
	From	To	
Week 1:			**Introduction to paediatrics and Neonatology.** definitions and terminologies, concepts and principles of pediatrics, comprehensive paediatric history;
Week 2			**Essential newborn care:** newborn examination, assessment APGAR score, birth asphyxia and Active resuscitation of the newborn
Week 3			**Birth injuries**;cephalo-haematoma, caput sussedeneum, brachial plexus palsies, fracture clavicle, cephalohaematoma. **Congenital disorders** and abnormalities,(club foot CTEV, Spina bifida, imperforate anus/ vagina cleft lip and palate, ambiqous genitalia. premature neonate, SGA and LGA Anemia, jaundice; ABO and rhesus incompatibility
Week 4			Hemorrhagic diseases of the newborn. congenitalinfections; Syphilis, rubella, herpes, toxoplasmosis, CMV Neonatal sepsis. Neonatal convulsions, Perinatal mortality.
Week 5:			**Growth and development** Growth monitoring Anthropometric measurements

		Factors influencing Milestones
Week 6:		**Infant feeding** Types of infant feeding
Week 7:		**Nutritional disorders** Micronutrient deficiencies. Malnutrition; WHO Classification Rickets.
Week 8:		Immunization EPI schedule
Week 9:		**CATs,**
Week 10:		**Immunizable diseases**
Week 11		Measles
Week 12:		**Tropical diseases** Aetiology, lifecycle, transmission, pathophysiology, presentation, investigations, treatment and control
Week 13:		HIV Life cycle, WHO staging and, Management of HIV /aids opportunistic infections.
Week 14:		**IMNCI** Classifications treatment and follow up care for child and young infant
Week 15:		Emergency Triage Assessment and Treatment
Week 16:		**Respiratory diseases** Anatomy and physiology of R/S Congenital defects, etiology, pathophysiology, presentation, differential, diagnosis, complications, management, prognosis and prevention, Coryza, foreign body, epiglottitis, Laryngo-tracheal (LTB) bronchitis, bronchiolitis,

		bronchiolitis, Bronchial Asthma, pneumonia,
Week 17:		Study week
Week 18:		**End of Semester Examinations**

Introduction to Pediatrics and Neonatology -Definitions and terminologies, concepts and principles of pediatrics, comprehensive Paediatric history; **Essential newborn care**; Normal newborn examination, assessment of the newborn, APGAR score, birth asphyxia and anoxia, Active resuscitation and care. **Birth injuries**, congenital disorders and abnormalities, premature neonate, SGA and LGA Anemia, jaundice; ABO and rhesus incompatibility and hemorrhagic diseases of the newborn. Congenital Infections; Syphilis, rubella, herpes, toxoplasmosis, CMV Neonatal sepsis, Neonatal convulsions, Perinatal mortality.**Growth and Development** - Growth monitoring, Factors influencing growth and development, developmental milestones.**Infant feeding and Nutritional disorders** - Breast feeding, Weaning and Artificial feeds. Micronutrient deficiencies.**Malnutrition**; WHO Classification of malnutrition; SAM; MAM and Rickets.**Immunization, Immunizable and Tropical diseases** -Vaccines, DVI (KEPI), National Immunization Schedule; Immunizable diseases: Etiology, pathophysiology, presentation, investigation, treatment, complications and prevention. Tropical diseases: aetiology, lifecycle, transmission, pathophysiology, presentation, investigations, treatment and control, WHO staging and, Management of HIV /aids opportunistic infections.**Kenya essential package of health -** IMNCI, ETAT plus WHO GUIDELINES: Concept of IMNCI, common childhood illnesses, Classification of sick children, Emergency Triage Assessment and Treatment of sick children. **Respiratory Diseases and Conditions -** Overview of Anatomy and physiology of the respiratory system; Congenital defects of respiratory system: etiology, pathophysiology, presentation, differential diagnosis, complications, management, prognosis and prevention, ENT: Coryza, foreign body, epiglottitis, Laryngo-tracheal bronchitis, bronchiolitis, bronchiolitis, Bronchial Asthma, pneumonia, pleural effusion, lung abscess.

Teaching Strategies

Interactive Lectures, Small Group Discussions, Demonstrations, Small Group Tutorials, Group Assignments, Virtual reality, e- learning.

Teaching/Learning Resources

Laptop, Computer, LCD projector, white board markers, and permanent markers, white board, Charts, videos, simulators - manikins, dummy, models.

Assessment Strategies

Formative: CAT(s) accounts for 40% of the total marks

Summative: End of Semester Examinations accounts for 60% of the total marks

References/Further Readings

Adetokunbo , L. and Herbert, G., (2003). *Short Textbook of Public Health Medicine forthe Tropics*, 4thEd.Boca Raton: CRC Press

Coovadia, H.M. and Wittenberg, D.F. (2011).*Textbook of Paediatrics,* 6th ED. Oxford: Oxford University Press

Hay, W. (2014).*Current Diagnosis and Treatment in Paediatrics*, 18th ED. Edinburg: McGraw Hill

Lissauer, T., Clayden, G., and Craft, A. (2012).*Illustrated Textbook of Paediatrics.* Edinburgh, Mosby.

Nelson E. W. (2009). *Textbook of Paediatrics*. 17th ED. Harcourt Asia: PTE. Ltd. Thomson press (1) Ltd.

Shubhangini A.J. (2002). *Nutrition and Dietics*. Delhi: Tata McGraw-Hill

Wood, C., Wood, C.H., DeGlanville, H. and Vaughan, J. P. (2008*) Community Health,* 3rd Ed. Nairobi AMREF

Prepared By: Name: _____
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Date: _____

Approved By: Name: _____
Signature: _____
Date: _____

Kenya Medical Training College
Department of Clinical Medicine

Course Outline
For
Diploma in Clinical Medicine & Surgery

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline for Surgery I

Code: Sur216
Hours: 60
Credit: 6

Competence
Module Competence

This module is designed to enable the learner acquire the appropriate knowledge and skills to diagnose and manage patients with general surgical and orthopaedic disorders/conditions.

Module Outcomes

By the end of this module, the learner should;

1. Explain the concepts and principles of surgery
2. Explain the concepts and principles of orthopedics and Traumatology
3. Attend pre and post-operative patients
4. Manage soft tissue conditions
5. diagnos and manage chest conditions appropriately.

Content Delivery

Week	Dates		
	From	To	
Week 1:	Introduction to surgery		definition,types surgery(general,orthopaedic,traumatology,cardiothoracic etc…),terminologies
Week 2:			clerkship(history and examination, imaging and other investigations, treatment of general surgery conditions)
Week 3			),metabolic response to injury(basic cncepts in homeostasis,metabolic stress response to surgery and trauma classification of surgical conditions, medical conditions that affect surgical treatment
Week 4	Introduction to orthopaedics		**;** diagnosis and management of orthopaedic disorders (history and examination, imaging and other investigations, treatment of orthopaedic disorders), pathology of fractures and fracture healing, principles of fracture management
Week 5:			types of anaesthesia (regional, local and general), care of the airway
Week 6:	Pre – and post operative surgical care.		pre and post-operative care of surgical patient(specific preoperativeproblems,care in operating room, common and serious post-operative complications),.
Week 7:			
Week 8:	Pre – and post operative surgical care.		types of anaesthesia (regional, local and general), care of the airway
Week 9:			C.A.TS
Week 10:	Soft tissue conditions.		burns(pathophysiology ofburninjury,airway and lungs,life threatening events with major burns,care of burnt patient,complication of burns), soft tissue infections, soft tissue injuries, ulcers, gangrene
Week 11			burns(pathophysiology ofburninjury,airway and lungs,life threatening events with major burns,care of burnt patient,complication of burns), soft tissue infections, soft tissue injuries, ulcers, gangrene
Week 12:	Chest conditions		obstruction of the airway, chest injuries: fracture ribs, flail chest, pneumothorax, cardiac tamponade, haemothorax, surgical emphysema, empyema, lung tumours, and breast conditions.

Week 13:		obstruction of the airway, chest injuries: fracture ribs, flail chest, pneumothorax, cardiac tamponade, haemothorax, surgical emphysema, empyema, lung tumours, and breast conditions.
Week 14:		
Week 15:		Study week
Week 16:		
Week 17:		
Week 18:		**End of Semester Examinations**

Module Content

Introduction surgery;definition,types surgery(general,orthopaedic,traumatology,cardiothoracic etc…),terminologies, clerkship(history and examination, imaging and other investigations, treatment of general surgery conditions),metabolic response to injury(basic cncepts in homeostasis,metabolic stress response to surgery and trauma), classification of surgical conditions, medical conditions that affect surgical treatment.**Introduction to Orthopaedics and Traumatology;** diagnosis and management of orthopaedic disorders (history and examination, imaging and other investigations, treatment of orthopaedic disorders), pathology of fractures and fracture healing, principles of fracture management, complications of fractures, special features of fractures in children, joint injuries(dislocations,sublaxations, anterior articular fractures). **Pre and Post-operative Surgical Care;** pre and post-operative care of surgical patient(specific preoperativeproblems,care in operating room, common and serious post-operative complications), types of anaesthesia (regional, local and general), care of the airway. **Soft Tissue Conditions;** burns(pathophysiology ofburninjury,airway and lungs,life threatening events with major burns,care of burnt patient,complication of burns), soft tissue infections, soft tissue injuries, ulcers, gangrene. **Chest Conditions;** obstruction of the airway, chest injuries: fracture ribs, flail chest, pneumothorax, cardiac tamponade, haemothorax, surgical emphysema, empyema, lung tumours, and breast conditions.

Teaching Strategies

Interactive Lectures, Small Group Assignments, and Small Group Discussions

Teaching/Learning resources

Computer, LCD Projector, White Board Markers, Permanent Markers, White Board, Charts, Chalk, Chalk Board.

Assessment strategies

Formative*:** Continuous Assessment Tests, Individual Assignments and Group AssignmentsSummative*:** End of Semester Examination

References/Further Readings

Atingà, J. E., Mutiso, V. M., & Otsyeno, F. M. (2014). *AORF Text Book of Orthopaedics.* Nairobi: Acrodile Publishing.

Burkitt, H. G., Quick, C. R., & Reed, J. B. (2014). *Essential Surgery - Problems, Diagnosis and Management.* London: Churchill Livingstone, ELSEVIER.

Dandy, D. J., & Edwards, D. J. (2009). *Essential Orthopaedics and Trauma.* London: Churchill Livingstone, ELSEVIER.

Ebnezar, J. R. (2016). *Textbook of Orthopedics.* New Delhi: Ansari.

Garden, O. J., & Parks, R. W. (2018). *Principles and Practice of Surgery.* London: ELSEVIER.

Hamblen, D. J., & Simpson, A. H. (2013). *Adams`s Outline of Fractures.* London: Churchill Livingstone, ELSEVIER.

Hamblen, D. S. (2010). *Outline of orthopaedics.* London: Elsevier Churchill Livingstone.

Kenneth, A., et al (2010). *Handbook of Fractures,* 4th Ed. Wolters Kluwer, Philadelphia

McRae, R. (2010). *Clinical Orthopaedic Examination.* London: Churchill livingstone Elsevier

Prepared By: Name: _____
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Date: _____

KENYA MEDICAL TRAINING COLLEGE
DEPARTMENT OF CLINICAL MEDICINE

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline for RH I (Gynaecology)

Code: GYN 104
Hours: 40
Credit: 4

Competence

Enable the learner assess, diagnose and manage patients with gynaecological conditions.

Module Outcomes

By the end of this module the learner should;

1. Demonstrate the understanding of concepts and principles of clinical methods in gynaecology
2. Recognize and manage disorders of Puberty, Menstruation, Menopause and Andropause
3. Demonstrate understanding of Human Sexuality
4. Identify and manage patients with Infertility
5. Explain Adolescence and Youth Health in relation to Reproductive function
6. Evaluate and manage patients with early pregnancy complications

Content Delivery

Week	Unit Name	Topic	Hours
1.			

2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.	Clinical Methods Puberty, Menstruation, Menopause and Andropause	Gynaecological history, physical examination and investigations in a gynaecological patient Skills lab demonstration Puberty Menstrual Cycle Menopause Andropause	**2** **2** **2** **2** **2** **2**
13.	Human Sexuality and its Disorders Infertility Adolescence and Youth Health	Sexual orientation and Deviations Normal sexual response Disorders of sexuality Introduction – definition, normal fertility, types of infertility; general factors influencing fertility Causes of infertility Management of infertility. Assisted reproductive technologies Introduction - definitions, changes that occur during adolescence Common medical conditions affecting adolescents and youths Harmful practices affecting Adolescents and Youths Peer education and counseling Youth friendly services	**1** **1** **2** **2** **2** **1** **1** **2** **1** **1** **1** **1**
14.	Early Pregnancy Complications	Abortion Ectopic pregnancy Molar pregnancy Gestational trophoblastic disease Hyperemesis gravidarum	**2** **1** **1** **2** **1**

15.	**Christmas and New Year Break**		
16.			
17.			
18.			
19.			
20.			
21.	**End of Semester Exams**		
22.			

Module content

Clinical Methods; gynecological history, physical examination in a gynecological patient, gynecological investigations.**Puberty, Menstruation, Menopause and Andropause;** normalpubertal changes, disorders of puberty, physiology of menstruation, menstrual disorders, management of menstrual disorders. Menopausal changes, manifestations of andropause, management of menopausal and andropausal disorders. **Human Sexuality and its Disorders:** sexual orientation,normal sexual response, disorders of sexuality, management of sexuality disorders, Sexual deviations. **Infertility;** introduction – definition, normal fertility, types of infertility; causes of infertility; management of infertility. Assisted reproductive technologies **Adolescents' and Youth Health:** definitions, changes that occur during adolescence, common conditions affecting adolescents and youths, harmful practices, peer education and counseling, youth friendly services. **Early Pregnancy complications;** abortion, ectopic pregnancy, molar pregnancy and gestational trophoblastic disease, hyperemesis gravidarum.

Teaching Strategies

Lectures, tutorials, Skills-lab, skills demonstrations in theatre, and at bedside.

Teaching/Learning Resources

Laptop computer, LCD projector, white board, white board markers, permanent markers, Flip Charts, Mannikins, Models, 3D Pictures, videos.

Assessment Strategies

Formative;Continuous assessment tests, individual assignments and group assignments***Summative;***End of semester examination, FQE.

References and Further readings;

Bain C., Burton K., Callander R., Ramsden I.,(2011) Gynaecology Illustrated, 6th Edition, Philadelphia, USA: Churchill Livingston/Elsevier,

DeCherney A. Nathan L., Laufer N., Roman A. (2007) Current Diagnosis & Treatment obstetrics &Gynaecology, 11thEdition, San Francisco, USA: McGraw Hill/Lange

DuttaD. (2005), Text book of Gynaecology, 4th Edition, Culcatta, India: New central Book Agency (P) Ltd.

Lobo R., Gershenson D., Lentz G., Valea F. (eds.), (2017) Comprehensive Gynaecology, 7th Edition, Philadelphia USA: Elsevier

MoH, (2003) Adolescent Reproductive Health and Development Policy

Monga A.(ed.) (2006) Gynaecology by Ten teachers18thEdition, London, UK: Book power ELST/HodderArnold

Symonds E., Symonds I., (2006) Essential Obstertics&Gynaecology, 4th Edition, Philadelphia USA: Churchill Livingstone

e-resources; case studies, case scenarios, simulations, soft wares, Apps

Prepared By: Name: _____

Signature: _____

Date: _____

Aproved By: Name: _____

Signature: _____

Date: _____

Kenya Medical Training College
Department of Clinical Medicine

Course Outline
For
Diploma in Clinical Medicine &Surgery

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline for Medicine I

Code: MED 216
Hours: 60
Credit: 6

Competence
To enable the learner apply the knowledge, skills and attitudes in the management of medical conditions.

.
Outcomes

1. Classify, diagnose and manage STIs
2. Demonstrate understanding of management of HIV/AIDS
3. Diagnose and manage tropical diseases
4. Manage Respiratory conditions
5. Manage Cardiovascular conditions

Module Units

Unit name	Hours	
	Theory	Practicals
1. STI, HIV,AIDS	10	0
2. Dermatology	10	0
3. Tropical Medicine	10	0
4. Respiratory conditions	10	0
5. Cardiovascular conditions 20 0		

Content Delivery

Week	Dates	Unit

	From	To	
Week 1:			**STIs**;definitions, classification ,common features of STIs, syndromic management**,** , complications
Week 2:			**HIV/AIDS;** Epidemiology, lifecycle of HIV virus, classifications/staging, opportunistic infections
Week 3			management and HBC **Dermatology**; overview of the anatomy and physiology of the skin, History taking, physical examination,
Week 4			pharmacology of topical applications, leprosy, skin bacterial infections, fungal, viral, pediculosis, insect bites, tungiasis,
Week 5:			scabies, albinism, Eczema, psoriasis, drug eruptions, vitiligo, acne vulgaris, carcinomas, ulcers**.**
Week 6:			**Tropical Medicine;** parasitic,(nematodes, cestodes, trematodes) protozoan, (malaria, trypanasomiasis, leishmaniasis, amoebiasis, giardiasis),
Week 7:			bacterial, (brucellosis, shigellosis, salmonellosis, anthrax, leptospirosis), fungal (candidiasis, cryptococcosis, blastomycosis, histoplasmosis)
Week 8:			viral, (haemorrhagic fevers, cytomegalovirus, infectious mononucleosis),**Respiratory conditions,** overview of anatomy and physiology, history taking, physical examination,
Week 9:			**CATs,**
Week 10:			Features of upper respiratory diseases, investigation, treatment and complications of respiratory diseases.
Week 11			Features of lower respiratory diseases, investigation, treatment

		and complications of respiratory diseases.
Week 12:		**Cardiovascular conditions,** overview of anatomy and physiology,
Week 13:		history taking, physical examination, features of cardiovascular diseases
Week 14:		features of cardiovascular diseases, investigations, treatment and complications of cardiovascular diseases
Week 15:		features of cardiovascular diseases, investigations, treatment and complications of cardiovascular diseases
Week 16:		features of cardiovascular diseases, investigations, treatment and complications of cardiovascular diseases
Week 17:		Revision/study week
Week 18:		**End of Semester Examinations**

Module Content

STIs;definitions, classification ,common features of STIs, syndromic management**,** , complications **HIV/AIDS;** Epidemiology, lifecycle of hiv virus, classifications/staging, opportunistic infections, management and HBC **Dermatology**; overview of the anatomy and physiology of the skin, History taking, physical examination, pharmacology of topical applications, leprosy, skin bacterial infections, fungal, viral, pediculosis, insect bites, tungiasis, scabies, albinism, Eczema, psoriasis, drug eruptions, vitiligo, acne vulgaris, carcinomas, ulcers**.Tropical Medicine;** parasitic,(nematodes, cestodes, trematodes) protozoan, (malaria, trypanasomiasis, leishmaniasis, amoebiasis, giardiasis), bacterial, (brucellosis, shigellosis, salmonellosis, anthrax, leptospirosis), fungal (candidiasis, cryptococcosis, blastomycosis, histoplasmosis) viral, (haemorrhagic fevers, cytomegalovirus, infectious mononucleosis),**Respiratory conditions,** overview of anatomy and physiology, history taking, physical examination, features of respiratory diseases, investigation, treatment and complications of respiratory diseases.

Cardiovascular conditions, overview of anatomy and physiology, history taking, physical examination, features of cardiovascular diseases, investigations, treatment and complications of cardiovascular diseases**.**

Teaching Strategies

Interactive Lectures, Small Group Tutorials and Small Group Assignments.

Teaching/Learning Resources

Computer, LCD projector, white board markers, permanent markers, white board, Charts.

Assessment Strategies;

Formative; Continuous Assessment Tests, Individual Assignments and Group Assignments

Summative; End of module examination

References and Further readings

1. Harrison's Principles of internal medicine 17th edition.
2. Davidson's Principles and Practice of medicine, 21st Edition.
3. Tropical Diseases AMREF
4. Kumar and Clerk Text book of clinical Medicine 6E Edition
5. Oxford Textbook of Medicine Michael Glynn, William Drake, Clinical Methods, 23rd Edition, 2012, London UK

Prepared By: Name: _____
Signature: _____
Date: _____

Approved By: Name: _____
Signature: _____
Date: _____

Kenya Medical Training College
Department of Clinical Medicine

Course Outline
For
Higher Diploma in Clinical Medicine &Surgery

(Clinical Pathology I)

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline for Clinical Pathology I

Code: **CLP 213**
Hours: 30
Credit: 3
Pre-requisite: Basic sciences for diploma in clinical medicine

Competence
To enable the learner demonstrate the understanding of pathological processes to the clinical features of diseases.

Outcomes

1. Explain the pathogenesis and pathology of the disorders of the cardiovascular system.
2. Explain the pathogenesis and pathology of the disorders of the respiratory system

Content Delivery

Week	Dates		Unit
	From	To	
Week 1:			Review of anatomy and physiology, cardiac failure,
Week 2:			Cardiomyopathies, myocarditis and pericarditis
Week 3			Rheumatic fever and rheumatic heart disease,
Week 4			Valvular heart disease and infective endocarditis

Week 5:		Disorders of arteries, hypertension, disorders of veins and lymphatics
Week 6:		Review anatomy and physiology. Disorders of upper respiratory tract –rhinitis, sinusitis,
Week 7:		Disorders of upper respiratory tract – laryngitis, diphtheria, tonsillitis, epiglottitis
Week 8:		Disorders of the lower respiratory tract – bronchitis. lung congestion, pulmonary
Week 9:		**CATs,**
Week 10:		Pneumonia, lung abscess, bronchiectasis
Week 11		Bronchial asthma, empyema, hydrothorax,
Week 12:		Pulmonary atelectasis, lung collapse, emphysema
Week 13:		asphyxia, pulmonary tuberculosis and lung carcinoma
Week 14:		
Week 15:		Make up lessons
Week 16:		
Week 17:		Study week
Week 18:		**End of Semester Examinations**

Module Content

Cardiovascular system; review of anatomy and physiology, cardiac failure, cardiomyopathies, myocarditis and pericarditis, rheumatic fever and rheumatic heart disease, valvular heart disease and infective endocarditis, disorders of arteries, hypertension, disorders of veins and lymphatics.

Respiratory system; review anatomy and physiology. Disorders of upper respiratory tract – rhinitis, sinusitis, laryngitis, diphtheria, tonsillitis, epiglottitis, Disorders of the lower respiratory tract – bronchitis. lung congestion, pulmonary oedema, pneumonia, lung abscess, bronchiectasis, broncho asthma, empyema, hydrothorax, pneumothorax, pulmonary atelectasis, lung collapse, emphysema, asphyxia, pulmonary tuberculosis and lung carcinoma.

Teaching Strategies

Lectures and tutorials.

Teaching/Learning Resources

Laptop computer, overhead projector, LCD projector, white board markers, permanent markers, white board, Charts, 3D Pictures.

Assessment Strategies

Formative: CAT(s) accounts for 40% of the total marks

Summative: End of Semester Examinations accounts for 60% of the total marks

References/Further Readings

Kishasha M (2016). *Textbook of human pathology*. 1st edition, Acrodile publishers, Nairobi, Kenya.

Harsh M (2014).*Textbook of Pathology*.1st edition. New Delhi: Jaypee Brothers, Medical Pub, India

NgtonC,& Muir (2014). *Textbook of Pathology*.15th edition, New Delhi.Jaypee Brothers, India

Prepared By: Name: _____
Signature: _____
Date: _____

Approved By: Name: _____
Signature: _____
Date: _____

KENYA MEDICAL TRAINING COLLEGE
DEPARTMENT OF CLINICAL MEDICINE

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline for Pharmacology and Therapeutics IV

Code: PTH 226
Hours: 60
Credit: 3

Competence

Acquire the appropriate knowledge, skills and attitudes in drug management of patients with cardiovascular, genitourinary, nervous system, and bone mineral disorders.

Outcomes

1. Prescribe diuretics and drugs acting on the cardiovascular system effectively.
2. Demonstrate understanding of drugs acting on genitourinary system and their use in patient management.
3. Demonstrate knowledge of drugs acting on endocrine system in patient management.
4. Prescribe drugs acting on autonomic and central nervous system appropriately
5. Utilize various drugs in the treatment of bone mineral disorders

Content Delivery

Week	Dates		Unit
	From	**To**	
Week 1:			**Diuretics and Drugs Acting on the Cardiovascular System;** diuretics (classification, osmotic, mercurial and carbonic anhydrase inhibitors, thiazides, loop diuretics and potassium sparing diuretics),
Week 2:			Cardiovasculardrugs *(*classification; cardiac glycosides, anti-angina drugs
Week 3			Anti-arrhythmic drugs
Week 4			Anticoagulants, protamine sulphate, anti-platelet and fibrinolytic drugs, haematinics
Week 5:			Anti-hypertensives (vasodilators, adrenergic neurone blocking agents / alpha adreno-receptor blockers), drugs for dyslipidaemia (statins, bile acid binding resins, fibrates)
Week 6:			**Drugs acting on the Genitourinary System;** classification, urinary antiseptics; drugs for urinary retention and enuresis,
Week 7:			Preparations acting on the uterus (prostaglandins and oxytoxics, myometrial relaxants), drugs that alter urine pH.
Week 8:			**Drugs Acting on Endocrine System;** classification, insulin preparations, oral hypoglycaemic agents (sulphonylureas, biguanides, meglitinides, thiazolidinediones).
Week 9:			**CATs**
Week 10:			Thyroid hormone and antithyroid agents /parathyroid medications; anabolic steroids and hormonal contraceptives; corticosteroids; drugs acting on the pituitary.
Week 11			**Drugs Acting on Autonomic and Central Nervous System;** classification, drugs acting on the autonomic nervous system (cholinergic drugs, anticholinergics, sympathomimetics,
Week 12:			Adrenergic receptor antagonists - alpha antagonists, beta adrenergic receptor antagonists (beta blockers).

Week 13:			Drugs for pain relief (analgesics and antipyretics - non-opioid analgesics and opioid analgesics), non-steroidal anti-inflammatory drugs (NSAIDS).
Week 14:			Steroids as anti-inflammatory agents, drugs used in rheumatic diseases.
Week 15:			Drugs used for treatment of gout, drugs used for treatment of soft tissue inflammation.
Week 16:			**Drugs used in the Treatment of Bone MineralDisorders**; biphosphonates, vitamin D and related compounds, calcium preparations.
Week 17:			Study Week
Week 18:			**End of Semester Examinations**

Module Content

Diuretics and Drugs Acting on the Cardiovascular System; diuretics (classification, osmotic, mercurial and carbonic anhydrase inhibitors, thiazides, loop diuretics and potassium sparing diuretics), cardiovascular drugs *(*classification; cardiac glycosides, anti-angina drugs, anti-arrhythmic drugs; anticoagulants, protamine sulphate, anti-platelet and fibrinolytic drugs, haematinics; anti-hypertensives (vasodilators, adrenergic neurone blocking agents / alpha adreno-receptor blockers), drugs for dyslipidaemia (statins, bile acid binding resins, fibrates) **Drugs acting on the Genitourinary System;** classification, urinary antiseptics; drugs for urinary retention and enuresis, preparations acting on the uterus (prostaglandins and oxytoxics, myometrial relaxants), drugs that alter urine pH.**Drugs Acting on Endocrine System;** classification, insulin preparations, oral hypoglycaemic agents (sulphonylureas, biguanides, meglitinides, thiazolidinediones); thyroid hormone and antithyroid agents /parathyroid medications; anabolic steroids and hormonal contraceptives; corticosteroids; drugs acting on the pituitary. **Drugs Acting on Autonomic and Central Nervous System;** classification, drugs acting on the autonomic nervous system (cholinergic drugs, anticholinergics, sympathomimetics, adrenergic receptor antagonists - alpha (α- antagonists) and beta adrenergic receptor antagonists (beta blockers). drugs for pain relief (analgesics and antipyretics - non-opioid analgesics and opioid analgesics), non-steroidal anti-inflammatory drugs (NSAIDS), steroids as anti-inflammatory agents, drugs used in rheumatic diseases, drugs used for treatment of gout, drugs used for treatment of soft tissue inflammation.

Drugs used in the Treatment of Bone MineralDisorders; biphosphonates, vitamin D and related compounds, calcium preparations.

Teaching Strategies

Interactive Lectures, Small Group Assignments, and Small Group Discussions

Teaching/Learning resources

Computer, LCD Projector, White Board Markers, Permanent Markers, White Board, Charts, Chalk, Chalk Board.

Assessment strategies

***Formative*:** Continuous Assessment Tests, Individual Assignments and Group Assignments

***Summative*:** End of Semester Examination

References/Further readings

16. Bennett, P., & Brown, M. (2009). *Clinical Pharmacology.* London: Churchill Livingstone, ELSEVIER.

17. Katzung, B. G., & Trevor, A. J. (2012). *Basic & Clinical Pharmacology.* London: LANGE.

Mary, J. (2008). *Pharmacology,* Lippincott Williams and Wilkins

18. Njau, E. (2014). *Pharmacology and Therapeutics.* Nairobi: Amref.

19. Rang, H., Dale, M., Ritter, J., Flower, R., & Henderson, G. (2012). *Rang and Dale`s Pharmacology.* London: Churchill Livingstone, ELSEVIER.

Satoskar, R. (2007). *Pharmacology and Pharmacotherapeutics* 6th edition.

20. Tripathi, K. (2013). *Essentials of Medical Pharmacology.* 4th edition. New Delhi: Jaypee.

Prepared by: Name: _____

Signature: _____

Date: _____

Approved by: Name: _____

Signature: _____

Date: _____

Kenya Medical Training College
Department of Clinical Medicine

Course Outline
For
Diploma in Clinical Medicine &Surgery

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline for Community Health III

Code: **CHE 223**
Hours: 30
Credit: 3
Pre-requisite(s): community health II, research and statistics

Module Competence

This module is designed to enable the learner acquire knowledge and applications of epidemiological approaches in the management, prevention and control of communicable and non-communicable diseases.

Module Outcomes

By the end of this module the learner should:

1. Apply epidemiological data and concepts in investigation and control measures of disease determinants in the community

2. Apply the principles of epidemiology in prevention, control and management of communicable diseases in the community.

3. Apply the principles of epidemiology in prevention, control and management of non-communicable diseases in the community.

Module Units		Hours	
		Theory	Practical
1.	principles of epidemiology	10	0
2.	communicable diseases	12	0
3.	Non communicable diseases	8	0

Content Delivery

Week	Dates		Unit
	From	To	
Week 1:			Principles of epidemiology, introduction, definitions, purpose of epidemiology, epidemiological focus, clinical focus
Week 2:			Objective of epidemiology, uses of epidemiology
Week 3			Sources of epidemiological data
Week 4			Mortality and morbidity statistics, epidemiological concept
Week 5:			Epidemiological studies
Week 6:			Communicable diseases, definition, standard case definition, classification,
Week 7:			Principles of management, management and control of an epidemic, specific communicable diseases-faeco-oral route diseases
Week 8:			Emerging and re-emerging disease
Week 9:			**cats**
Week 10:			specific communicable diseases-airborne diseases
Week 11			Water-related diseases
Week 12:			**Non-communicable diseases,** Definitions, classification, causes, direct and risk factors,
Week 13:			types of risk factors, modifiable risk factors, shared risk factors,

		metabolic risk factors, Social determinants of Health,Urbanization and its impact on NCDs, tobacco, alcohol, obesogenic environment,childhood obesity, the nutrition transition,
Week 14:		Food marketing and advertisements, Physical inactivity,Mental Health and other NCDs,Finances,The role of youth as a vulnerable group with an operational role, principles of management, prevention, control,
Week 15:		Specific non-communicable diseases.
Week 16:		Specific non-communicable diseases.
Week 17:		Study week
Week 18:		**End of Semester Examinations**

Module Content

principles of epidemiology;Definition of terms, purpose of epidemiology, differences between epidemiological and clinical focus, sources of epidemiological information, mortality and morbidity statistics, epidemiological concept, epidemiological studies. **Communicable diseases -** Definition, standard case definition, classification, principles in management, prevention and control, notification and reporting of emerging and re-emerging infections, infestations, specific communicable diseases**. Non-communicable diseases (NCDs);** Definition, classification, causes, direct and risk factors, types of risk factors, modifiable risk factors, shared risk factors, metabolic risk factors, Social determinants of Health,Urbanization and its impact on NCDs, tobacco, alcohol, obesogenic environment,childhood obesity, the nutrition transition, Food marketing and advertisements, Physical inactivity,Mental Health and other NCDs,Finances,The role of youth as a vulnerable group with an operational role, principles of management, prevention, control, notification, specific non-communicable diseases.

Teaching Strategies; Interactive Lectures, Small Group Tutorials and Group Assignments.

Teaching/Learning Resources: Laptop, Computer, Overhead Projector, LCD Projector, White Board Markers, Permanent Markers, White Board, Charts, 3D Pictures.

Assessment Strategies;

Formative:Continuous Assessment Tests, Individual Assignments and Group Assignments***Summative:***End of Semester Examinations

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Signature: _____
Date: _____

Approved By: Name: _____
Signature: _____
Date: _____

Kenya Medical Training College
Department of Clinical Medicine

Course Outline
For
Higher Diploma in Clinical Medicine &Surgery
(Paediatrics and Child Health II)

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline for Paediatrics and Child Health II

Code: **PCH 322**
Hours: 20
Credit: 02

Pre-requisites: Paediatrics 1 andBasic sciences, (Physiology, Anatomy, pathology. Pharmacology, Clinical methods, Parasitology, Biochemistry).

Module Competence

Diagnose and manage paediatric psychiatry, emergencies and paediatric oncology.

Module Outcomes

1. Diagnose and Manage paediatric psychiatry.
2. Diagnose and manage Paediatric emergencies.
3. Diagnose and manage Paediatric oncology.

Module Units	Hours	
	Theory	Practical
1. Paediatric Psychiatry	6	
2. Paediatrics Emergencies	8	
3. Paediatric Oncology	6	

Content Delivery

Week	Dates		Unit
	From	To	
Week 1:			**Paediatric psychiatry** Predisposing factors, features and management of: Depression, Psychosis,
Week 2			Attention deficit disorders,
Week 3			Behavioral difficulties
Week 4			**Paediatric emergencies** Respiratory emergencies
Week 5:			Cardio vascular system emergencies;
Week 6:			CNS emergencies; GIT emergencies;
Week 7:			near drowning; Foreign body in the oesophagus, Water intoxication,
Week 8:			Poisoning: Hydrocarbons. Organophosphate, ASA, Paracetamol/Datura
Week 9:			**CATs,**
Week 10:			**Paediatric oncology:** Common childhood illnesses
Week 11			Solid tumours
Week 12:			Bone tumours
Week 13:			
Week 14:			Semester 6 (mock) exam
Week 15:			
Week 16:			Study week
Week 17:			Assessment
Week 18:			**FQE Final qualifying examination**

Module content

Paediatric psychiatry: Predisposing factors, features and management of: Depression, Psychosis, Attention deficit disorders, Behavioral difficulties **Paediatric emergencies** - Respiratory emergencies; Cardio vascular system emergencies; CNS emergencies; GIT emergencies; near drowning; poisoningsForeign body in the oesophagus, Water intoxication, Hydrocarbons. Organophosphate, ASA, Paracetamol/Datura.**Introduction to paediatric oncology** - Common childhood tumours; intracranial tumours; Burkittstumours.

Teaching Strategies

Interactive Lectures, Small Group Discussions, Demonstrations, Small Group Tutorials, Group Assignments, Virtual reality, e- learning.

Teaching/Learning Resources

Laptop, Computer, LCD projector, white board markers, and permanent markers, white board, Charts, videos, simulators - manikins, dummy, models.

Assessment Strategies

Formative: CAT(s) accounts for 40% of the total marks

Summative: End of Semester Examinations accounts for 60% of the total marks

References/Further Readings

Adetokumbo, L. and Herbert, G., (2003). Short Textbook of Public Health.

Medicine for the Tropics 4th ed. Boca Raton: CRC Press.

Cherry F. (1992) Paediatric /infectious diseases Vol. 1 (3rded). W.B. Saunders Co.

Coovadia and Wittenberg D.F 2011.Textbook of Paediatrics.Sixth Edition.

Karen M. Robert M. Kliegman, MD, Richard E. Behrman Nelsons Essentials of.

London, Stanfield p.

Lissauer, T. Clayden G. and Craft, A., (2012). Illustrated Textbook of Paediatrics.

Edinburgh Mosby

Nelson E., W., (2009).Textbook of Paediatrics.22nd edition. Harcourt Asia: PTE Ltd.

Thomson press (1) Ltd.

Robert C., Tasker, I., Robert J. McClure I. Carlo L. Acerini, Oxford handbook of Paediatrics. Oxford University Press 22 edition.Oxford University Press.

William W. Hay, W., Myron J. Levin Current Diagnosis and Treatment in Paediatrics. 20th Edition.McGraw Hill. ISBN: 978007.

Wood, C., Wood, C. H., DeGlanville, H. and Vaughan, J.P. (2008). Community Health, 3rd ed. Nairobi: AMREF.

Prepared By: Name: _____
Signature: _____
Date: _____

Approved By: Name: _____
Signature: _____
Date: _____

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Kenya Medical Training College
Department of Clinical Medicine

Course Outline
For
Diploma in Clinical Medicine & Surgery

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline for Surgery II

Code: Sur226
Hours: 60
Credit: 6

Module Competence

This module is designed to enable the learner acquire the appropriate knowledge and skills indiagnosing and managing patients with surgical and orthopaedic disorders/conditions.

Module Outcomes

By the end of this module, the learner should;

1. diagnos and manage gastrointestinal tract and abdominal conditions.
2. Manage Orthopaedic conditions
3. Manage injuries of upper and lower limb
4. Perform minor surgical procedures

Content Delivery

Week	Dates		Unit
	From	To	
Week 1:			Gastro-intestinal tract
Week 2:			Gastro-intestinal tract
Week 3			Gastro-intestinal tract
Week 4			Gastro-intestinal tract
Week 5:			Orthopaedics.
Week 6:			Orthopaedics.
Week 7:			Orthopaedics.
Week 8:			Orthopaedics.
Week 9:			C.A.TS
Week 10:			Orthopaedics.
Week 11			Injuries of limbs.
Week 12:			Injuries of limbs
Week 13:			Injuries of limbs
Week 14:			Injuries of limbs
Week 15:			Minor surgical procedures
Week 16:			Minor surgical procedures
Week 17:			Minor surgical procedures.
Week 18:			**End of Semester Examinations**

Module Content

Gastrointestinal Tract and Abdominal Conditions; disorders of the oesophagus, disorders of stomach and duodenum, disorders of lower GIT, ano-rectal conditions, hernias, hepatobiliary disorders, abdominal trauma. **Orthopaedics;** deformities, inflammatory lesions of soft tissue(bursitis,irritative bursitis etc), tumours of soft tissue(neurofibroma,lipoma,haemagioma, liposarcoma,rhabdomyosarcomaetc),tumours of bone(benign and malignant),bone infections and arthritis(types).**Injuries of Upper and Lower Limbs;** fractures of upper limb, dislocations of upper limb, pelvic and hip joint injuries, fractures of femur, injuries of the knee, fractures of tibia and fibula, injuries of the ankle and foot. **Minor Surgical Procedures; s**urgical instruments, suture materials, catheterization, incision and drainage, wound closure, circumcision, removal of ganglion, surgical toilet, escharectomy and fasciotomy, underwater seal drainage.

Teaching Strategies

Interactive Lectures, Small Group Assignments, and Small Group Discussions

Teaching/Learning resources

Computer, LCD Projector, White Board Markers, Permanent Markers, White Board, Charts, Chalk, Chalk Board.

Assessment strategies

Formative*:** Continuous Assessment Tests, Individual Assignments and Group AssignmentsSummative*:** End of Semester Examination

References/Further Readings

Atingà, J. E., Mutiso, V. M., & Otsyeno, F. M. (2014). *AORF Text Book of Orthopaedics.* Nairobi: Acrodile Publishing.

Burkitt, H. G., Quick, C. R., & Reed, J. B. (2014). *Essential Surgery - Problems, Diagnosis and Management.* London: Churchill Livingstone, ELSEVIER.

Dandy, D. J., & Edwards, D. J. (2009). *Essential Orthopaedics and Trauma.* London: Churchill Livingstone, ELSEVIER.

Ebnezar, J. R. (2016). *Textbook of Orthopedics.* New Delhi: Ansari.

Garden, O. J., & Parks, R. W. (2018). *Principles and Practice of Surgery.* London: ELSEVIER.

Hamblen, D. J., & Simpson, A. H. (2013). *Adams`s Outline of Fractures.* London: Churchill Livingstone, ELSEVIER.

Hamblen, D. S. (2010). *Outline of orthopaedics.* London: Elsevier Churchill Livingstone.

Kenneth, A., et al (2010). *Handbook of Fractures,* 4th Ed. Wolters Kluwer, Philadelphia

McRae, R. (2010). *Clinical Orthopaedic Examination.* London: Churchill livingstone Elsevier

Prepared By: Name: _____
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Date: _____

Approved By: Name: _____
Signature: _____
Date: _____

KENYA MEDICAL TRAINING COLLEGE
DEPARTMENT OF CLINICAL MEDICINE

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline for RH II

Code: GYN 204
Hours: 40
Credit: 4

Module competence

This module is designed to enable the learner assess, diagnose and manage patients with gynaecological conditions.

Module Outcomes

By the end of this module the learner should;

1. Identify and manage pelvic/genital tract infections
2. Recognize and manage patients with Neoplasms of the Female Reproductive system
3. Identify and manage patients with conditions and injuries of the female genital tract
4. Perform selected gynaecological procedures

Content Delivery

Week	Unit Name	Topic	Hours
1.	Pelvic Infections	Pelvic inflammatory disease, Pelvic abscess, Bartholin's abscess Vaginal discharge	**2** **1** **1**
2.	STI's	Gonorrhoea, Chlamydia, Chancroid Syphilis, Herpes simplex, Molluscumcontagiosum,Genital warts, Pubic lice.	**2** **2**
3.	Genital tract Infections Conditions of Genital tract	Candidiasis Trichomonasvaginalis vaginitis Bacterial Vaginosis Benign conditions of the Cervix	**2** **2**
4.	Neoplasms of the Female reproductive system	Cervical Intra-epithelial Neoplasia Cancer of the Cervix	**2** **2**
5.	Neoplasms of the Female reproductive system	Benign and pre-malignant tumors of the ovary Cancer of the ovary	**2** **2**
6.	Neoplasms of the Female reproductive system	Uterine Fibroids Adenomyosis Endometrial Hyperplasia	**2** **1** **1**
7.	Neoplasms of the Female reproductive system	Cancer of the Uterus Pre-malignant disorders of the Vulva	**2** **2**
8.	Neoplasms of the Female reproductive system	Cancer of the vulva Introduction to breast disorders	**1** **1**
9.	Conditions and injuries of the genital tract	Genital prolapse Genital tract fistula	**2** **2** **2**
10.	Operative gynaecology	Common surgical procedures carried out on ovaries, fallopian tubes, uterus, cervix, vagina, and vulva Video and Skillslab demonstrations	 **2** **2**
11.			
12.			
13.			
14.			
15.			

16.			

Module content

Pelvic Infections and STI's: pelvic inflammatory diseases, pelvic abscess, cervicitis, vaginitis, Bartholin's abscess, gonorrhoea, chlamydia, syphilis, chancroid, genital warts, herpes simplex, molluscumcontagiosum, candidiasis, trichomonasvaginalis, pubic lice. **Neoplasms of the Female reproductive system:** benign and malignant tumors of the ovary; benign, pre-malignant and malignant conditions of the uterus; benign, pre-malignant and malignant disorders of the cervix; pre-malignant and malignant diseases of the vulva, introduction to breast disorders. **Conditions and injuries of the genital tract:** genital prolapse, genital tract fistula. **Operative gynecology:** common surgical procedures carried out on ovaries, fallopian tubes, uterus, cervix, vagina, and vulva;

Teaching Strategies

Lectures, tutorials, Skills-lab, skills demonstrations in theatre and at bedside.

Teaching/Learning Resources

Laptop computer, LCD projector, white board, white board markers, permanent markers, Flip Charts, Mannikins, Models, 3D Pictures, videos.

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Assessment Strategies

Formative;Continuous assessment tests, individual assignments and group assignments***Summative;***End of semester examination, FQE.

References and Further readings;

Bain C., Burton K., Callander R., Ramsden I., (2011) Gynaecology Illustrated, 6th Edition, Philadelphia, USA: Churchill Livingston/Elsevier,

DeCherney A. Nathan L., Laufer N., Roman A. (2007) Current Diagnosis & Treatment obstetrics &Gynaecology, 11thEdition, San Francisco, USA: McGraw Hill/Lange

Dutta D. (2005), Text book of Gynaecology, 4th Edition, Culcatta, India: New central Book Agency (P) Ltd.

Lobo R., Gershenson D., Lentz G., Valea F. (eds.), (2017) Comprehensive Gynaecology, 7th Edition, Philadelphia USA: Elsevier

MoH, (2003) Adolescent Reproductive Health and Development Policy

Monga A. (ed.) (2006) Gynaecology by Ten teachers18th Edition, London, UK: Book power ELST/HodderArnold

Symonds E., Symonds I., (2006) Essential Obstertics&Gynaecology, 4th Edition, Philadelphia USA: Churchill Livingstone

e-resources; case studies, case scenarios, simulations, softwares, Apps

Prepared By: Name: _____

Signature: _____

Date: _____

Approved By: Name: _____

Signature: _____

Date: _____

Kenya Medical Training College
Department of Clinical Medicine

Course Outline
For
Diploma in Clinical Medicine &Surgery

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline for Medicine II

Code: MED 226
Hours: 60
Credit: 6

Competence
To equip the learner with knowledge, skills and attitudes to manage medical conditions under GIT, Haematological, urinary and endocrine systems.

Outcomes

1. Diagnose and manage Gastro-intestinal tract, Hepatobiliary System and Peritoneal Diseases
2. Diagnose and manage Haematological, Lymphoreticular Disorders and Administer Blood Transfusion.
3. Diagnose and manage Urinary System Disorders

4. Diagnose and manage Endocrine Disorders

Module Units	Hours	
	Theory	Practicals
1. Gastro-intestinal tract, hepatobiliary system and Peritoneal diseases	20	0
2. Haematological, Lymphoreticular Disorders and Blood Transfusion	16	0
3. Urinary system	10	0
4. Endocrine disorders	14	0

Content Delivery

Week	Dates		Unit
	From	To	
Week 1:			**Gastro-intestinal tract;** overview of anatomy and physiology of gastrointestinal tract system, history taking, physical examination, features of gastrointestinal tract diseases, investigations and treatment of GIT diseases.
Week 2:			features of gastrointestinal tract diseases, investigations and treatment of GIT diseases. **Hepatobiliary System and Peritoneal Disorders;** overview of anatomy and physiology of hepatobilliary system and peritoneum
Week 3			history taking, physical examination, features of hepatobilliary system and peritoneum, investigations in hepatobilliary system and peritoneum, hepatitis,
Week 4			liver failure, liver cirrhosis, hepatic encephalopathy, portal hypertension / Varices, hepatoma, cholecystitis, pancreatitis, cancer of pancreas
Week 5:			**Peritoneal Disorders;** peritonitis, ascites**.**
Week 6:			**Haematological disorders;** overview of anatomy and

		physiology of haematological disorders, history taking, physical examination, features of haematological disorders, investigations, anaemias, (membranopathies, spherocytosis, elliptocytosis, haemoglobinopathies,
Week 7:		thalassaemias and sickle cell syndromes,) enzymopathies, (Glucose 6 Phosphate Dehydrogenase (G6PD) deficiency, pyruvate kinase deficiency), acquired haemolytic disorders, polycythaemia.
Week 8:		**Lymphoreticular Disorders and Blood Transfusion;** myeloma, lymphoma, (burkitts lymphoma, Hodgkin's and non-Hodgkin's lymphomas),
Week 9:		**CATs,**
Week 10:		Acute and chronic, myelocytic and lymphocytic leukaemia, blood and blood products, blood grouping and cross matching, indications, complications and their management.
Week 11		**Urinary System Conditions**; overview of anatomy and physiology of renal system, history and physical examination in renal diseases, features of renal diseases, investigations in renal diseases
Week 12:		congenital renal conditions/ malformations, urinary tract infections (cystitis, pyelonephritis), glomerulonephritis,

		nephroticsyndrome, acute renal failure, chronic renal failure,
Week 13:		renal osteodystrophy, dialysis; renal calculi, renal cell carcinoma, HIV nephropathy, **Endocrine Disorders;** overview of the anatomy and physiology of endocrine glands, history taking
Week 14:		physical examination, anterior pituitary gland and hypothalamic disorders, hypopituitarism, empty sella, pituitary masses, hyperprolactinemia, growth hormone,(growth hormone deficiency, acromegaly
Week 15:		disorders of posterior pituitary gland, thyroid disorders, parathyroid gland disorders, adrenal gland disorders, diabetes mellitus.
Week 16:		diabetes mellitus and its complications
Week 17:		Study week
Week 18:		**End of Semester Examinations**

Module Content

History taking: format of history taking in dermatology, review of other systems, record history taken. **Description of lesions:** primary lesions, secondary lesions. **Perform physical examination:** vital signs, general examination, cutaneous examination, and examination of other systems**. Investigations:** general and specific investigations. **Principles of therapy**: topical therapy-use of different preparations. **Special procedures:** phototherapy, laser therapy, cryotherapy, dermatology surgery, electrocautery, iontophoresis, patient education, cosmetic procedures.

Teaching Strategies

Lectures, tutorials and laboratory practical demonstrations.

Teaching/Learning Resources

Laptop computer, overhead projector, LCD projector, white board markers, permanent markers, white board, Charts, 3D Pictures.

Assessment Strategies

Formative: CAT(s) accounts for 40% of the total marks

Summative: End of Semester Examinations accounts for 60% of the total marks

References/Further Readings

Barbara L. (1996) Principles of dermatological therapy 2nd Edition

Michael. G (2012) Hutchison's textbook of Clinical Methods, 6th edition.

Prepared By: Name: _____
Signature: _____
Date: _____

Approved By: Name: _____
Signature: _____
Date: _____

Kenya Medical Training College
Department of Clinical Medicine

Course Outline
For
Higher Diploma in Clinical Medicine &Surgery
(Clinical Pathology 11)

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline for Clinical Pathology 11

Code: **CLCP223**
Hours: 30
Credit: 3
Pre-requisite (s): Basic sciences for diploma in clinical medicine

Competence
To enable the learner to gain the necessary knowledge and skills for use to relate clinical features of diseases to their pathological processes.

Outcomes
By the end of this module the learner should:

1. Describe the causes and pathogenesis of the disorders of the GIT.
2. Explain the causes and pathogenesis of the disorders of the hepatobiliary systems
3. Explain the causes and pathogenesis of the disorders of genitourinary systems.
4. Describe the causes and pathogenesis of the disorders of the nervous system

Content Delivery

Week	Dates		Unit
	From	To	
Week 1:			Introduction to GIT
Week 2:			Congenital disorders of the upper GIT
Week 3			Inflammatory conditions of upper GIT
Week 4			Neoplastic conditions of upper GIT
Week 5:			Inflammatory diseases of the stomach and duodenum
Week 6:			Neoplastic disorders of the stomach and duodenum
Week 7:			Congenital conditions of the small and large intestine
Week 8:			Infective conditions of the small and large intestines
Week 9:			**CATs,**
Week 10:			Neoplastic conditions of small and large intestine.
Week 11			Congenital conditions of the biliary system
Week 12:			Infective conditions of the liver and biliary duct
Week 13:			Tumours of the biliary system
Week 14:			Conditions of the pancreas
Week 15:			Congenital conditions of CNS
Week 16:			Infective conditions of CNS
Week 17:			Degenerative and neoplastic conditions of the CNS
Week 18:			**End of Semester Examinations**

Module Content

Gastrointestinal tract: Introduction to GIT pathology, congenital disorders of upper and lower GIT (hair lip, cleft palate). Inflammatory conditions of upper GIT glossitis, parotitis, oesophagitis, gastritis. Neoplastic conditions; tumours of the tongue, parotid and oesophagus, stomach and duodenum.Conditions of lower GIT; (dysenteries, ulcerative colitis, enteritis, Congenital abnormalities; hirsprungs disease, megacolon). Neoplastic condtions of lower GIT (cancer of colon and small intestines). **Hepatobiliary system**: Congenital conditions; biliary atresia. Inflammatory conditions (viral hepatitis, cirrhosis of the liver, cholecystitis, pancreatitis). Metabolic conditions (diabetes mellitus). Neoplastic conditions (tumours of the liver, biliary tract and pancreas) .**Genitourinary pathology**: Congenital conditions (renal agenesis, polycystic kidney). Renal inflammatory disorders (all forms of glomerulonephritis, nephrotic syndrome, renal failure, renal necrosis, pyelonephritis, cystitis, urethritis). Neoplastic disorders (hepatoma, cancer of biliary ducts and pancreatic cysts and cancers). **The nervous system**: Congenital conditions (bifidas, anencephaly, hydrocephalous). Inflammatory conditions (bacterial, viral and fungal meningitis, rabies, syphilis). Degenerative and traumatic conditions peripheral neuritis, myelitis, subarachnoid, epidural, subdural haemorrhages). Neoplastic conditions (gliomas, ependimonas),

Teaching Strategies

Lectures and tutorials.

Teaching/Learning Resources

Laptop computer, overhead projector, LCD projector, white board markers, permanent markers, white board, Charts, 3D Pictures.

Assessment Strategies

Formative: CAT(s) accounts for 40% of the total marks

Summative: End of Semester Examinations accounts for 60% of the total marks

References/Further Readings

Kishasha M (2016). *Textbook of human pathology*. 1st edition, Acrodile publishers, Nairobi, Kenya.

Harsh M (2014).*Textbook of Pathology*.1st edition. New Delhi: Jaypee Brothers, Medical Pub, India

NgtonC,& Muir (2014). *Textbook of Pathology*.15th edition, New Delhi.Jaypee Brothers, India

Prepared By: Name: _____
Signature: _____
Date: _____

Approved By: Name: _____
Signature: _____
Date: _____

Kenya Medical Training College
Department of Clinical Medicine

Course Outline
For
Diploma in Clinical Medicine & Surgery

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline for Surgery III

Code: Sur312
Hours: **20**
Credit: **2**

Module Competence

This module is designed to enable the learner identify and manage head, neck and nervous system conditions.

Module Outcomes

By the end of this module, the learner should;

1. diagnosis and management of head and neck conditions.

2.demonstrate understanding of nervous system disorders.

Week	Dates		Unit
	From	To	
Week 1:			Head and neck
Week 2:			Head and neck
Week 3			Head and neck
Week 4			Head and neck
Week 5:			Head and neck
Week 6:			Nervous system
Week 7:			
Week 8:			Nervous system
Week 9:			C.A.TS
Week 10:			Nervous system
Week 11			Nervous system
Week 12:			Nervous system
Week 13:			Nervous system
Week 14:			Revision
Week 15:			Revision
Week 16:			Revision
Week 17:			Revision
Week 18:			**End of Semester Examinations**

Module Content

Head and Neck Conditions; head and neck tumours, cleft lip and palate, ranula.**Nervous System Conditions;** congenital anomalies(spinabifida,spina bifida occulta,spina bifida Apesta,equinovarus,spasticparesis,peripheral nerve lesions,brachial plexus injuries, hydrocephalus, head injury.

Teaching Strategies

Interactive Lectures, Small Group Assignments, and Small Group Discussions

Teaching/Learning resources

Computer, LCD Projector, White Board Markers, Permanent Markers, White Board, Charts, Chalk, Chalk Board.

Assessment strategies

Formative*:** Continuous Assessment Tests, Individual Assignments and Group AssignmentsSummative*:** End of Semester Examination

References/Further Readings

Atingà, J. E., Mutiso, V. M., & Otsyeno, F. M. (2014). *AORF Text Book of Orthopaedics.* Nairobi: Acrodile Publishing.

Burkitt, H. G., Quick, C. R., & Reed, J. B. (2014). *Essential Surgery - Problems, Diagnosis and Management.* London: Churchill Livingstone, ELSEVIER.

Dandy, D. J., & Edwards, D. J. (2009). *Essential Orthopaedics and Trauma.* London: Churchill Livingstone, ELSEVIER.

Ebnezar, J. R. (2016). *Textbook of Orthopedics.* New Delhi: Ansari.

Garden, O. J., & Parks, R. W. (2018). *Principles and Practice of Surgery.* London: ELSEVIER.

Hamblen, D. J., & Simpson, A. H. (2013). *Adams`s Outline of Fractures.* London: Churchill Livingstone, ELSEVIER.

Hamblen, D. S. (2010). *Outline of orthopaedics.* London: Elsevier Churchill Livingstone.

Kenneth, A., et al (2010). *Handbook of Fractures,* 4th Ed. Wolters Kluwer, Philadelphia

McRae, R. (2010). *Clinical Orthopaedic Examination.* London: Churchill livingstone Elsevier

Prepared By: Name: _____
Signature: _____
Date: _____

Approved By: Name: _____
Signature: _____
Date: _____

Kenya Medical Training College
Department of Clinical Medicine

Course Outline
For
Diploma in Clinical Medicine &Surgery
(Paediatrics and Child Health 111)

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline forPrinciples of Diagnosis and Management in Endocrine System.

Code: **PCH312**
Hours: 20
Credit: 2

Competence
This module is designed to diagnose and manage childhood diseases and conditions.

Outcomes
1. Manage endocrine disorders
2. Manage neurological disorders

MODULE UNITS

Unit name	Hours theory	Hours practical

Content Delivery

Week	Dates		Unit
	From	To	
Week 1:			**Endocrine disorders**: pancreatic gland disorders, predisposing factors, aetiology, pathophysiology, features, complications and management of DM, DKA
Week 2:			DKA, diabetes insipidus;
Week 3			Adrenal gland disorders: predisposing factors, aetiology, pathophysiology, features, complications and management of cushings' syndrome
Week 4			addisons' disease; pituitary gland disorders; aetiology, pathophysiology, features, complications and management of cretinism,
Week 5:			Acromegaly; gonadal disorders: ambiguous genitalia, spadias,
Week 6:			Thyroid and parathyroid diseases: aetiology, pathophysiology, features, complications and management of hypo/hyperthyroidism
Week 7:			**Neurological disorders:** review of anatomy and physiology; infections: aetiology, pathophysiology, features, complications and management
Week 8:			Convulsive disorders: aetiology, pathophysiology, features, complications and management.
Week 9:			**MOCKS**

Week 10:		
Week 11		
Week 12:		
Week 13:		
Week 14:		
Week 15:		
Week 16:		
Week 17:		STUDY WEEK
Week 18:		**FINAL QUAALIFYING EXAMS**

Module Content

Endocrine disorders: pancreatic gland disorders, predisposing factors, aetiology, pathophysiology, features, complications and management of DM, DKA, diabetes insipidus; Adrenal gland disorders: predisposing factors, aetiology, pathophysiology, features, complications and management of cushings' syndrome, addisons' disease; pituitary gland disorders; aetiology, pathophysiology, features, complications and management of cretinism, acromegaly; gonadal disorders: ambiguous genitalia, spadias, thyroid and parathyroid diseases: aetiology, pathophysiology, features, complications and management of hypo/hyperthyroidism. **Neurological disorders:** review of anatomy and physiology; infections: aetiology, pathophysiology, features, complications and management; convulsive disorders: aetiology, pathophysiology, features, complications and management.

Teaching Strategies

Interactive lectures, Small Group Discussions and Small Group Assignments, Case studies

Teaching/Learning Resources

Laptop, Computers, LCD Projector, White board and markers, Permanent Markers.

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Learner assessment:

Formative Assessment: Continuous Assessment Tests, Individual assignments and Group Assignments

Summative Assessment: End of semester examination).

References/Further Readings

Adetokunbo , L. and Herbert, G., (2003). *Short Textbook of Public Health Medicine forthe Tropics*, 4thEd.Boca Raton: CRC Press

Coovadia, H.M. and Wittenberg, D.F. (2011).*Textbook of Paediatrics,* 6th ED. Oxford: Oxford University Press

Hay, W. (2014).*Current Diagnosis and Treatment in Paediatrics*, 18th ED. Edinburg: McGraw Hill

Lissauer, T., Clayden, G., and Craft, A. (2012).*Illustrated Textbook of Paediatrics.* Edinburgh, Mosby.

Nelson E. W. (2009). *Textbook of Paediatrics*. 17th ED. Harcourt Asia: PTE. Ltd. Thomson press (1) Ltd.

Shubhangini A.J. (2002). *Nutrition and Dietics*. Delhi: Tata McGraw-Hill

Wood, C., Wood, C.H., DeGlanville, H. and Vaughan, J. P. (2008*) Community Health,* 3rd Ed. Nairobi AMREF

Prepared By: Name: _____
Signature: _____
Date: _____

Approved By: Name: _____
Signature: _____
Date: _____
Date: _____

Kenya Medical Training College
Department of Clinical Medicine
Course Outline
For
Diploma in Clinical Medicine &Surgery

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline for community health IV

Code: **CHE 113**
Hours: 30
Credit: 3

Competence

This module is designed to enable the learner acquire knowledge on applications of concepts of demography, OHS and skills to address drugs and substances abuse.

Module Outcomes

By the end of this module the learner should:

1. Apply concepts of demography in planning health services
2. Demonstrate knowledge in management, prevention and control of common occupational health conditions and hazards
3. Manage cases of drug and substances abuse in the community

Module Units

Module Units

	Hours	
Unit name	**Theory**	**Practical**
1.occupational health and safety	**10**	**0**
2.Demography	**10**	**0**

3.Drug and substance abuse	**10**	**0**

Module Content

Occupational Health and safety; Historical background, principles, of occupational classification of occupational hazards, control and prevention, occupation related diseases, Occupational Health and Safety Regulations. **Demography,** definition of terms, population pyramids, dependence ratio, world population trends, Kenya population trends, sources and uses of demographic data, census, types, limitations of census data, population measurements in health, migration, planning for health services. **Drugs and substances abuse;** definition, commonly abused drugs and substances, health effects, management, abuse of prescription drugs, alcohol control Act and NACADA Act.

Content Delivery

Week	**Dates**		**Unit**
	From	**To**	
Week 1:			Occupational Health and safety; Historical background, principles, of occupational health and safety
Week 2:			Definitions of terms
Week 3			control and prevention, occupation related diseases,
Week 4			occupation related diseases Health promotion in work place
Week 5:			Occupational Health and Safety Regulations.
Week 6:			Demography**,** definition of terms, population pyramids,
Week 7:			dependence ratio, world population trends,
Week 8:			Kenya population trends, sources and uses of demographic data,
Week 9:			**cats**
Week 10:			population measurements in health, migration, planning for health services.
Week 11			**Drugs and substances abuse;** definition, commonly abused drugs and substances,

Week 12:		health effects of drugs and substance abuse. addiction
Week 13:		Signs and symptoms of drug and substances use
Week 14:		management, abuse of prescription drugs, alcohol control
Week 15:		Alcohol control Act and NACADA Act.
Week 16:		Field trip
Week 17:		Study week
Week 18:		**End of Semester Examinations**

Module Content

Occupational Health and safety; Historical background, principles, of occupational health and safety, classification of occupational hazards, control and prevention, occupation related diseases, Occupational Health and Safety Regulations. **Demography,** definition of terms, population pyramids, dependence ratio, world population trends, Kenya population trends, sources and uses of demographic data, census, types, limitations of census data, population measurements in health, migration, planning for health services. **Drugs and substances abuse;** definition, commonly abused drugs and substances, health effects, addiction, sign and symptoms of drug abuse, management, abuse of prescription drugs, alcohol control Act and NACADA Act.

Health Promotion Materials; TeachingAids, Posters, Charts, Videos, Demonstrations, Role Plays.

Teaching Strategies

Interactive Lectures, Small Group Tutorials and Group Assignments.

Teaching/Learning Resources

Computer, Overhead Projector, LCD Projector, White Board Markers, Permanent Markers, White Board, Charts, 3D Pictures.

Assessment Strategies

Formative:Continuous Assessment Tests, Individual Assignments and Group Assignments***Summative:***End of Semester Examinations

Prepared By: Name: _____
Signature: _____
Date: _____

Approved By: Name: _____

Signature: _____
Date: _____

Kenya Medical Training College
Department of Clinical Medicine

Course Outline
For
Diploma in Clinical Medicine & Surgery

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline for Medicine III

Code: **MED 312**
Hours: 20
Credit: 2

Competence
Diagnose and manage common medical conditions affecting nervous and musculoskeletal systems.

Outcomes

1. Demonstrate understanding in diagnosis and management of central and peripheral nervous system diseases
2. Demonstrate understanding in diagnosis and management of musculoskeletal system diseases

Module units

Unit name	Hours	
	Theory	Practicals
1. Nervous system 10	0	
2. Musculoskeletal system	10	0

Content Delivery

Week	Dates		Unit
	From	To	
Week 1:			overview of anatomy and physiology of central nervous system, history taking, physical examination, investigations in central nervous system.
Week 2:			features of CNS disorders, upper and lower motor neurons
Week 3			Headaches; types and management, dizziness
Week 4			Meningitis, encephalitis
Week 5:			Coma (definition, causes,management), space occupying lesions
Week 6:			Cerebral vascular accident
Week 7:			Epilepsy
Week 8:			parkinsonism, alzheimer's, peripheral nervous system, disorders of cranial nerve palsies
Week 9:			**CATs,**
Week 10:			overview of anatomy and physiology of musculoskeletal system, history taking, physical examination
Week 11			investigations in musculoskeletal system, features of musculoskeletal disorders,
Week 12:			Rheumatoid arthritis, degenerative arthritis
Week 13:			Gouty arthritis, ankylosing spondylitis
Week 14:			Auto immune disorders (systemic lupus erythromatosus)
Week 15:			Osteoporosis, Rickets and osteomalacia

Week 16:		Hypo and hyper calcemia
Week 17:		Revision
Week 18:		**End of Semester Examinations**

Module Content

Nervous System; overview of anatomy and physiology of central nervous system, history taking, physical examination, investigations in central nervous system, features of CNS disorders, upper and lower motor neurons, headache, dizziness, meningitis, encephalitis, coma, space occupying lesions, cerebral vascular event, epilepsy, parkinsonism, alzheimer's, peripheral nervous system, disorders of cranial nerve palsies. **Musculoskeletal System Disorders;** overview of anatomy and physiology of musculoskeletal system, history taking, physical examination, investigations in musculoskeletal system, features of musculoskeletal disorders, rheumatoid arthritis, systemic lupus erythromatosus, gouty athritis.

Teaching Strategies

Interactive Lectures, Small Group tutorials and Small Group Assignments.

Teaching/Learning Resources:

Computer, LCD projector, White board markers, Permanent markers, White board, Charts.

Assessment Strategies

Formative; Continuous Assessment Tests, Individual Assignments and Group Assignments

Summative; End of module examination

References/Further Readings

Barbara L. (1996)Principles of dermatological therapy 2nd Edition

Michael. G (2012) Hutchison's textbook of Clinical Methods, 6th edition.

Prepared By: Name: _____
Signature: _____
Date: _____

Approved By: Name: _____
Signature: _____
Date: _____

Kenya Medical Training College
Department of Clinical Medicine

Course Outline
For
Diploma in Clinical Medicine &Surgery

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline for health systems management III

Code: **HSM312**
Hours: 20
Credit: 2

Competence
To enable the learner develop competencies in medico-legal cases and corruption management.

Outcomes

1. Identify and manage medico-legal issue
2. Identify causes ,effects and preventive methods of corruption

Module Units

Unite name	Hours	
	Theory	Practicals

1. Medico-legal issues	10
2. Corruption and anticorruption measures	10

Content Delivery

Week	Dates		Unit
	From	To	
Week 1:			**Medico-legal issues;** definitions, professional code of conduct
Week 2:			medico-leagal cases and their consequences,
Week 3			rape case, assault, patient mismanagement and court sessions
Week 4			regulatory bodies, government laws in healthcare
Week 5:			law
Week 6:			**Corruption and anticorruption measures;** definition, causes, effects to the economy,
Week 7:			preventive measures, public officer conduct
Week 8:			ethics Professionalism, work ethics
Week 9:			**CATs,**
Week 10:			Professional etiquette
Week 11			
Week 12:			
Week 13:			
Week 14:			
Week 15:			
Week 16:			
Week 17:			
Week 18:			**End of Semester Examinations**

Module Content

Medico-legal issues; definitions, professional code of conduct, medico-leagal cases and their consequences, regulatory bodies, government laws in healthcare.**Corruption and anticorruption measures;** definition, causes, effects to the economy, preventive measures, public officer conduct and ethics Professionalism, work ethics, medico – legal issues,

Teaching Strategies

Small Group Lectures, Small Group Tutorials and Small Group Assignments.

Teaching/Learning Resources

Computer, LCD projector, white board markers, permanent markers, white board.

Assessment Strategies

Formative:Continuous Assessment Tests, Individual Assignments and Group Assignments***Summative:***End of semester examinations

References and Further readings

Ministry of medical services, and ministry of public health and sanitation,(2011). National monitoring and evaluation (M&E) Guidelines and standard operating procedures Nairobi government printers.

Ministry of Medical services and Ministry of Public Health and Sanitation (2011). Implementation guidelines for the Kenya Quality Model for Health. Nairobi: government printer

Prepared By: Name: _____
Signature: _____
Date: _____

Approved By: Name: _____
Signature: _____
Date: _____

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Kenya Medical Training College
Department of Clinical Medicine

Course Outline
For
Diploma in Clinical Medicine & Surgery
Medicine IV

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline for Medicine IV

Module 56: Medicine IV

Code: MED 423
Hours: 10
Credit: 1

Pre-requisite: Medicine I, II and III

Module Competence

At the end of this module the learners should be able to make a diagnosis and manage common medical emergencies

Module Outcomes

By the end of this module, the learner should:

1. Manage Medical Emergencies

Module Units

Unit name	Hours	
	Theory	Practicals
Medical emergencies	10	0

Content delivery

Week	Dates		Unit
	From	To	
Week 1:			overview of BLS and first aid, brief history taking,
Week 2:			physical examination, investigations, (blood gas analysis, blood sugars. malaria tests, haemoglobin measures, lumbar puncture, radiological imaging etc),
Week 3			shock, haemorrhagic shock, cerebral malaria, meningitis, sickle cell crisis, acute pulmonary oedema, status asthmaticus,
Week 4			septicaemic pulmonary thromboembolism, hypertensive crisis, cardiac tamponade, acute renal failure,
Week 5:			quick DKA, hypoglycaemia, addison's crisis, thyroid storm, hypothyroid coma, hypovolaemic shock,
Week 6:			anaphylactic shock, status epilepticus
Week 7:			upper gastro intestinal tract bleeding, poisoning, bee stings, insect bites, snake bites; animal bites
Week 8:			CAT
Week 9:			
Week 10:			
Week 11			
Week 12:			
Week 13:			
Week 14:			
Week 15:			

Week 16:	Study week
Week 17:	Revision
Week 18:	**End of Semester Examinations**

Module Contents

Medical Emergencies; overview of BLS and first aid, brief history taking, quick physical examination, investigations, (blood gas analysis, blood sugars. malaria tests, haemoglobin measures, lumbar puncture, radiological imaging etc), septicaemic shock, haemorrhagic shock, cerebral malaria, meningitis, sickle cell crisis, acute pulmonary oedema, status asthmaticus, pulmonary thromboembolism, hypertensive crisis, cardiac tamponade, acute renal failure, DKA, hypoglycaemia, addison's crisis, thyroid storm, hypothyroid coma, hypovolaemic shock, anaphylactic shock, status epilepticus, upper gastro intestinal tract bleeding, poisoning, bee stings, insect bites, snake bites; animal bites.

Teaching Strategies

Interactive lectures, Small Group Tutorials and Small Group Assignments.

Teaching/Learning Resources

Computer, LCD projector, white board markers, permanent markers, white board, Charts.

Assessment Strategies

Formative;Continuous Assessment Tests, Individual Assignments, Term papers and Group Assignments

***Summative*;** End of semester examination

References/Further Readings

Colledge (editor2010), *Davidsons principles and practice ofmedicine* 21st edition,London. Elsevier Churchil Livingstone publishers

Douglas. (2005), *Macleod's clinical examination*. 11th edition Elsevier Churchil Livingstone publishers.ISBN:9780443074059

Harrison (2008), *Harrison's principles of internal medicine*, 17th edition, New York. McGraw Hill publishers
Kumar and Clark.(2005), *clinical medicine*.6th edition. London. Elsevier saunders publishers
Michael G. Drake,W. (2012) Oxford Textbook of Medicine, (23rd Edition), London, UK.

Prepared By: Name: _____
Signature: _____
Date: _____

Approved By: Name: _____
Signature: _____
Date: _____

Kenya Medical Training College
Department of Clinical Medicine

Course Outline
For
Diploma in Clinical Medicine & Surgery
Surgery IV

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline for Surgery IV

Module 54: Surgery IV

Code:	**SUR 322**
Hours:	20
Credit:	2

Pre-requisites: surgery I,II and III

Module Competence

This module is designed to enable the learner diagnose and manage disorders of the urogenital system and injuries of the spine.

Module Outcomes

By the end of this module, the learner should;

1. Manage diseases and disorders of Urogenital system
2. Carry out diagnosis and management of injuries of the spine

Module Units

Unit Name	Hours	
	Theory	Practicals
Urogenital System Conditions	10	0
Injuries of the Spine	10	0

Content Delivery

Week	Dates		Unit
	From	To	
Week 1:	**Urogenital System Conditions**		renaltumours, haematuria and differential diagnosis, conditions of the prostate gland.
Week 2:			, penile conditions, undescended testis, torsion of testis
Week 3			, scrotal conditions, urine retention
Week 4	**Injuries of the Spine**		classification of spinal column injuries, mechanism of spine injuries,
Week 5:			
Week 6:			cervical spine injuries, thoracic spine injuries
Week 7:			lumbosacral spine injuries,
Week 8:			management of a spinal injury patient (paraplegia, quadriplegia),
Week 9:			
Week 10:			, prolapsed intervertebral disc
Week 11			
Week 12:			
Week 13:			
Week 14:			
Week 15:			
Week 16:			
Week 17:			Revision
Week 18:			**End of Semester Examinations**

Module Content

Urogenital System Conditions; renal tumours, haematuria and differential diagnosis, conditions of the prostate gland, penile conditions, undescended testis, torsion of testis, scrotal conditions, urine retention. **Injuries of the Spine;** classification of spinal column injuries, mechanism of spine

injuries, cervical spine injuries, thoracic spine injuries, lumbosacral spine injuries, management of a spinal injury patient (paraplegia, quadriplegia), prolapsed intervertebral disc.

Teaching Strategies

Interactive Lectures, Small Group Assignments, and Small Group Discussions

Teaching/Learning resources

Computer, LCD Projector, White Board Markers, Permanent Markers, White Board, Charts, Chalk, Chalk Board.

Assessment Strategies

Formative*:** Continuous Assessment Tests, Individual Assignments and Group AssignmentsSummative*:** End of Semester Examination

References/Further Readings

Atingà, J. E., Mutiso, V. M., & Otsyeno, F. M. (2014). *AORF Text Book of Orthopaedics.* Nairobi: Acrodile Publishing.

Burkitt, H. G., Quick, C. R., & Reed, J. B. (2014). *Essential Surgery - Problems, Diagnosis and Management.* London: Churchill Livingstone, ELSEVIER.

Dandy, D. J., & Edwards, D. J. (2009). *Essential Orthopaedics and Trauma.* London: Churchill Livingstone, ELSEVIER.

Ebnezar, J. R. (2016). *Textbook of Orthopedics.* New Delhi: Ansari.

Garden, O. J., & Parks, R. W. (2018). *Principles and Practice of Surgery.* London: ELSEVIER.

Hamblen, D. J., & Simpson, A. H. (2013). *Adams`s Outline of Fractures.* London: Churchill Livingstone, ELSEVIER.

Hamblen, D. S. (2010). *Outline of orthopaedics.* London: Elsevier Churchill Livingstone.

Kenneth, A., et al (2010). *Handbook of Fractures,* 4th Ed. Wolters Kluwer, Philadelphia

McRae, R. (2010). *Clinical Orthopaedic Examination.* London: Churchill livingstone Elsevier.

Solomon, L. W. (2009). *Apley's System of Orthopaedics and Fractures.* London: CRC Press.

Solomon, L., Warwick, D., & Nayagam, S. (2014). *Apley and Solomon`s Concise System of Orthopaedics and Trauma.* London: CRC Press.

Williams, N. S., Bulstrode, C. J., & O`Connell, P. R. (2008). *Bailey & Love`s Short Practice of Surgery.* London: Hodder ARNOLD.

Prepared By: Name: _____
Signature: _____
Date: _____

Approved By: Name: _____
Signature: _____

Kenya Medical Training College
Department of Clinical Medicine

Course Outline
For
Diploma in Clinical Medicine & Surgery
Reproductive health IV

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline for reproductive health IV

Module 55: Reproductive Health IV

Code:	**REH 322**
Hours:	20
Credit:	2

Pre-requisite(s); Reproductive health III

Module Competence

This module is designed to enable the learner diagnose and manage reproductive health conditions

Module Outcomes

By the end of this module, the learner should;

1. Diagnose and manage/refer conditions requiring operations

2. Perform simple surgical contraception procedures

Module units

Unit Name	Hours	
	Theory	Practicals
Obstetric and gynecological conditions requiring operations	8	2
Simple surgical contraception procedures & Circumcision	6	4

Content Delivery

Week	Dates		Unit
	From	To	
Week 1:			
Week 2:	**Common operations in Obstetrics and Gynaecology**;		Episiotomies, forceps delivery, vacuum extraction ,
Week 3			pre and post-operative care
Week 4			caesarean section
Week 5:			Manual removal of placenta and repair of tears;
Week 6:	**- Surgical contraception & Voluntary male medical vasectomy**		- Bilateral tubal ligation
Week 7:			vasectomy
Week 8:			
Week 9:			**CATs**
Week 10:			
Week 11			
Week 12:			
Week 13:			
Week 14:			
Week 15:			
Week 16:			
Week 17:			Revision
Week 18:			**End of Semester Examinations**

Module content:

Common operations in Obstetrics and Gynaecology; - Episiotomies, forceps delivery, vacuum extraction , pre and post-operative care, caesarean section, Manual removal of placenta

and repair of tears; - **Surgical contraception & Voluntary male medical vasectomy** - Bilateral tubal ligation, vasectomy and various types of male vasectomy (voluntary male medical, etc)

Teaching Strategies

Interactive lectures, small group demonstrations, video interactions

Teaching/Learning Resources

Projectors, Flipcharts, whiteboard, simulated patients, resource center, videos.

Assessment Strategies

Formative: Assignments, Term Paper, Oral Assessment, CAT

Summative: Final qualifying examinations

References/Further Readings

Cunningham GF, Leveno LK, Bloom SL, Hauth CJ, Rouse J, and Spong CY (2010) Williams obstetrics. (23rd Ed.). New York, McGraw Hill companies Ltd.

Dutta DC. (2008) D.C Dutta's Textbook of Gyneacology (6th Ed.).London, New central Book Agency (p) Ltd.

Monga A., (2006) .Gyneacology by Teachers (18th Ed.). London, Hooder Arnold, Symonds EM and Symonds I.M. (2004). Essential obstetrics and Gynacology Churchill Livingstone, Elsevier.

Oats J. and Abraham S. (2005) Fundamentals of obstetrics and ynaecologychurchillLivingstone, Elsevier Ltd.

Prepared By: Name: _____
Signature: _____
Date: _____

Approved By: Name: _____
Signature: _____
Date: _____

Kenya Medical Training College
Department of Clinical Medicine

Course Outline
For
Community health V

Lecturer's Details

Name:	
Qualifications:	
Phone Number:	
Email address:	
Signature:	
Date:	

Course Outline for community health V

Code: **CHE 323**
Hours: 30
Credit: 3

Competence
Implement family health care and universal health care

Module Outcomes

By the end of this module the learner should:

By the end of this module the learner should:

1. Demonstrate understanding of fundamental Concepts of family health care
2. Demonstrate understanding of universal health care
3. Provide home based care

Module units

Unit name	Hours

	Theory	Practical
1.Family health care	10	4
2.Universal health coverage	6	4
3. Home based care	4	2

Content Delivery

Week	Dates		Unit
	From	To	
Week 1:			**Family health care;** definition, family, objectives, principles.
Week 2:			approaches (family as the context, family as he client, family as a system, family as a component of society)
Week 3			merits, demerits, range, role of a clinical officer, family assessment
Week 4			Health appraisal, health beliefs, communication, identifying families at risk for health problem.
Week 5:			FIELD TRIPS
Week 6:			**Universal health care;** definition, objectives, components
Week 7:			health care financing, health service delivery, health workforce.
Week 8:			health facilities, quality assurance mechanisms, information systems
Week 9:			**cats**
Week 10:			Benefits of UHC. Risk sharing in health (insurances).
Week 11			Home based care;introduction to HBC, objectives,components, rationale,
Week 12:			principles, infection control in the community, diseases covered in HBC. Advantages and disadvantages.
Week 13:			Field trips

Week 14:		fields
Week 15:		Field trips
Week 16:		revision
Week 17:		Study week
Week 18:		**End of Semester Examinations**

Module Content

Family health care; definition, family, objectives, principles, approaches (family as the context, family as he client, family as a system, family as a component of society), merits, demerits, range, role of a clinical officer, family assessment, health appraisal, health beliefs, communication, identifying families at risk for health problem.**Universal health care;** definition, objectives, components (health care financing, health service delivery, health workforce, health facilities, quality assurance mechanisms, information systems), benefits.Risk sharing in health (insurances).**Home based care;** introduction to HBC, objectives,components, rationale, principles, infection control in the community, diseases covered in HBC. Advantages and disadvantages.

Teaching Strategies

Interactive Lectures, Small Group Tutorials and Group Assignments.

Teaching/Learning Resources

Computer, Overhead Projector, LCD Projector, White Board Markers, Permanent Markers, White Board, Charts, 3D Pictures.

Assessment Strategies

Formative:Continuous Assessment Tests, Individual Assignments and Group Assignments***Summative:***End of Semester Examinations

Prepared By: Name: _____
Signature: _____
Date: _____

Approved By: Name: _____
Signature: _____
Date: _____