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
By the end of this module, the learner should;

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 for Research

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;

1. **Formative;** Continuous assessment tests, individual assignments and group assignments
2. **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; Onyayo S, :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

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
(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

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

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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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

By the end of this module, the learner should;

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

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*, Lippincott Williams 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
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

By the end of this module, the learner should;

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
6. Apply the principles of IMNCI and ETAT plus in the management of common childhood illnesses
7. 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. congenital infections; 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

1. *Formative:* CAT(s) accounts for 40% of the total marks
2. *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 for the Tropics*, 4th Ed.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 Mc Graw-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: _____

Kenya Medical Training College

Department of Clinical Medicine

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

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 preoperative problems, 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 to 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 preoperative problems, 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: _____
Signature: _____
Date: _____

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Signature: _____
Date: _____

KENYA MEDICAL TRAINING COLLEGE
DEPARTMENT OF CLINICAL MEDICINE

Course Outline
For
Diploma in Clinical Medicine & Surgery
(Reproductive Health I)

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	Gynaecological history, physical examination and investigations in a gynaecological patient	**2**
		Skills lab demonstration	**2**
	Puberty,	Puberty	**2**
	Menstruation,	Menstrual Cycle	**2**
	Menopause and	Menopause	**2**
	Andropause	Andropause	**2**
13.	Human Sexuality and its Disorders	Sexual orientation and Deviations	**1**
		Normal sexual response	**1**
		Disorders of sexuality	**2**
	Infertility	Introduction – definition, normal fertility, types of infertility; general factors influencing fertility	
		Causes of infertility	**2**
		Management of infertility.	**2**
		Assisted reproductive technologies	**1**
	Adolescence and Youth Health	Introduction - definitions, changes that occur during adolescence	**1**
		Common medical conditions affecting adolescents and youths	**2**
		Harmful practices affecting Adolescents and Youths	**1**
		Peer education and counseling	**1**
		Youth friendly services	**1**
			1
14.	Early Pregnancy Complications	Abortion	**2**
		Ectopic pregnancy	**1**
		Molar pregnancy	**1**
		Gestational trophoblastic disease	**2**
		Hyperemesis gravidarum	**1**
15.			

16.			
21.	**End of Semester Exams**		

Module content

Clinical Methods; gynecological history, physical examination in a gynecological patient, gynecological investigations. **Puberty, Menstruation, Menopause and Andropause;** normal pubertal 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

1. ***Formative;*** Continuous assessment tests, individual assignments and group assignments
2. ***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, 11th Edition, 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/Hodder Arnold

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

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

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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
By the end of this module the learner should;

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;

1. **Formative;** Continuous Assessment Tests, Individual Assignments and Group Assignments
2. **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: _____
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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 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
By the end of this module the learner should;

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:	CARDIOVASCULAR SYSTEM		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:	RESPIRATORY SYSTEM		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

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

References/Further Readings

1. Kishasha M (2016). *Textbook of human pathology*. 1st edition, Acrodile publishers, Nairobi, Kenya.
2. Harsh M (2014). *Textbook of Pathology*. 1st edition. New Delhi: Jaypee Brothers, Medical Pub, India
3. Ngton C, & Muir (2014). *Textbook of Pathology*. 15th edition, New Delhi. Jaypee Brothers, India

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Date: _____

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