Bayero University, Kano (BUK)

Clinical Sciences

Medicine and Dentistry

MBBS

**30% Additional Courses to CCMAS Course Structure/Summary**

**100 Level**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Course Code** | **Course Tittle** | **Units** | **Status** | **LH** | **PH** |
| BUK-COM-101 | History of Medicine | 2 | C | 30 | **0** |
|  | **Total** | **2** |  |  |  |

**300 Level**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Course Code** | **Course Tittle** | **Units** | **Status** | **LH** | **PH** |
| BUK-COM-301 | Character building, Professionalism and Teamwork in Health care | 2 | **C** | 15 | 45 |
|  | **Total** | **2** |  |  |  |

**500 Level**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Course Code** | **Course Tittle** | **Units** | **Status** | **LH** | **PH** |
| BUK-COM-501 | Social and traditional practices affecting health in Northwest Nigeria | 3 | C | 30 | 45 |
|  | **Total** | **3** |  |  |  |

**600 Level**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Course Code** | **Course Tittle** | **Units** | **Status** | **LH** | **PH** |
| BUK-SUG-601 | Minimal Access Surgery | 2 | C | 15 | 45 |
| BUK-MED-601 | Nephrology II | 2 | C | 15 | 45 |
| BUK-MED-602 | Clinical Haematology and oncology | 2 | C | 45 | 45 |
| BUK-MED-603 | Rheumatology and Care of the Elderly II | 2 | C | 15 | 45 |
|  | **Total** | **8** |  |  |  |
|  | **Grand Total** | **15** |  |  |  |

Bayero University, Kano (BUK)

Clinical Sciences

Medicine and Dentistry

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BUK-COM-101**- History of Medicine** (2 Units; Core, L=30 P= 0)

**Senate-approved relevance**

The occurrence of diseases has been around since the existence of mankind. From time immemorial man has been interested in trying to control disease. The medicine man, the priest, the herbalist and the magician, all undertook in various ways to cure man's disease and/or to bring relief to the sick. In an almost complete absence of scientific medical knowledge, it would not be fair to say that the early practitioners of medicine contributed nothing to the alleviation of man's suffering from disease. Medical knowledge in fact has been derived, to a very great degree, from the intuitive and observational propositions and cumulative experiences gleaned from others. A history of medicine thus contributes a review of accomplishments and errors, false theories and misinformation and mistaken interpretations. This is in line with the vision of medical education in Bayero university to expose the medical student to historical milestones in the evolution of contemporary medical practice.

**Overview**

History of medicine is the study of the evolution of man and of human knowledge down the ages; of the biographies of eminent individuals who developed medicine; of the discoveries and inventions in different historical periods; and of the ever-changing concepts, goals and objectives of medicine. During its evolution, which proceeded by stages, with advances and halts, medicine has drawn richly from the traditional cultures of which it is a part, and later from biological and natural sciences and more recently from social and behavioral sciences. Medicine is thus built on the best of the past. In the crucible of time, medicine has evolved itself into a social system heavily bureaucratized and politicized. The "explosion" of knowledge during the 20th century has made medicine more complex, and treatment more costly, but the benefits of modern medicine have not yet penetrated the social periphery in many countries. The glaring contrasts in the state of health between the developed and developing countries, between the rural and urban areas, and between the rich and poor have attracted worldwide criticism as "social injustice". The commitment of all countries, under the banner of the World Health Organization, is to wipe out the inequalities in the distribution of health resources and services and attain the Sustainable Development Goals. The goal of modern medicine is no longer merely treatment of sickness. The other and more important goals which have emerged are prevention of disease, promotion of health and improvement of the quality of life of individuals and groups or communities. In other words, the scope of medicine has considerably broadened during recent years. It is also regarded as an essential component of socio-economic development. This course would introduce the history of medicine and all the important physicians who have played a role in the development of modern-day medicine. It would also highlight the various evolutionary trends in the history of medicine including the Greek, Indian, Chines and Egyptian.

**Objectives**

1. Explain the history of medicine.
2. Describe the various stages in the evolution of history of medicine.
3. Recognize the pictures of famous physicians and other models relevant to history of medicine.
4. Relate the modern-day medicine with culture and beliefs of humankind.
5. Name the first-generation medical schools, physicians and their role in Medical Education in Nigeria.

**Learning Outcomes**

On completion of the course, students should be able to:

1. Discuss the history of medicine.
2. Enumerate the various stages in the evolution of history of medicine from different part of the world.
3. Identify prominent physicians such as the Hippocrates as well as models relevant to history of medicine.
4. Recall the first-generation medical schools, physicians and their role in Medical Education in Nigeria.
5. Relate the modern-day medicine with cultural and norms/beliefs of human in different geographical location.

**Course contents**

The course would consist of both didactic lectures and practical. The lectures would consist of origin and history of medicine, the evolution of history of medicine during the various period including the Indian, Chinese, Greek, Roman and Egyptian medicine. There would be description and presentation of pictures of famous physicians that have played important roles in the history of medicine. The link between the ancient knowledge and understanding of medical practice and the modern-day knowledge of sciences as it influences medical practice would be discussing. The names, location and roles of early day physicians and medical practitioners in Nigeria would also be discus. Similarly, first medical schools and the evolution of medicine in Nigeria would also be highlighted. There would also be practical sessions in which students would visits both public health laboratory and public health museum. They would see all the pictures of famous physicians as well as the models that are relevant to public health. They would identify each picture and relate it with role played in the history of medicine.

**Minimum Academic Standards**

Laptops, modems, e-library/subscriptions, audio-visuals, lecture halls, means of transport to the communities.

Bayero University, Kano (BUK)

Clinical Sciences

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BUK-COM-301 **Character building, Professionalism, teamwork in healthcare,** (2 Units; Core; L = 15; P = 45)

**Senate-approved relevance**

This course is designed in line with the vision and mission of Bayero University Kano to produce graduates that are highly qualified with excellent knowledge and high proficiency in skills capable of delivering excellent, respectful, empathic and culturally attuned healthcare services to society devoid of exploitation. The character, professional outlook as well as the works ethics of the graduates would be sharpened by the course to achieve this goal. This course would further strengthen the graduates to work as a team with others in the health sector to achieve desired set out team objectives while at the same time encouraging individual members’ professional development through appropriate mentorship and character building that would discourage the development of the barrage of emerging 21 st century societal character vices inclusive of, but not limited to drug and substance abuse. In essence this course would enshrine the humane and professional aspects of the graduates as they serve society armed with knowledge and skills consistent with the vision and mission of Bayero University.

**Overview**

A major life expectation of the graduates from this program is the deployment of their services to a variety of clients including, students, colleagues and vulnerable groups, in the Nigerian milieu and beyond. Graduates of this program working with others, would also be expected to research in to, propose, design and implement programs, policies and legislation in many areas of need to enhance better societal outcomes in health and education. Accordingly, this course would prepare graduates from this program to deploy their expertise in knowledge, skills, professionalism and work ethics in a culturally accepted manner, in the various services they offer to a variety of clients in health care, academia and other societal domains. The course participants would be exposed to principles of professionalism, work ethics as well as appropriate communication and counselling skills and techniques that are consistent with the various cultural milieus of practice the participants are likely to encounter. Furthermore, in order to enhance the collaborative nature of the work they would be involved in post qualification, the course participants would be furthermore exposed to ingredients of successful teamwork, appropriate leadership styles, mentorship and character-building skills and ways of refraining from 21 st century societal vices such as drug and substance abuse.

**Objectives**

The objectives of the course are to:

1. Describe various types of leadership styles applicable in clinical and academic settings.

2. Produce students with various skills of mentoring in clinical and academic settings.

3. Enumerate the characteristics of a successful team in achieving team objectives.

4. Describe roles professionalism in various fields of health professional endeavor.

5. Describe the principles and practice of psychology in health care settings.

6. Describe the principles of effective communication for patients and healthcare team.

7. Discuss the essentials of successful character building for various personality traits.

8. Describe the general principles of ethics in medicine and health care research.

9. Identify the risk factors and preventive strategies for substance abuse.

**Learning Outcomes**

On completion of the course, students should be able to:

1. Identify at least three common types of leadership styles with 2 merits and demerits of each.

2. Discuss any two theories of leadership that could be applied in healthcare.

3. Identify at least three mentoring skills needed by all healthcare professionals.

4. Enumerate four attributes of a successful team.

5. Enumerate five circumstances where professionalism is required to meet client needs and expectations.

6. Discuss human behaviour and its application in health counselling.

7. Demonstrate skills in conduct 3 counselling sessions in 3 recognized clinical settings.

8. Demonstrate effective communication skills in dealing with clients, and the public.

9. Enumerate 4-character traits each for 3 personality types.

10. Enumerate 4 ethical challenges and 4 appropriate ethical principles to address them in a clinical practice.

11. Enumerate 4 preventive strategies to address 3 forms of drug abuse.

**Course contents**

Concept of leadership and meaning of leaders. Theories, principles and styles of leadership. Methods of developing team wisdom. Teamwork as a personal skill. Creating powerful partnership in mentoring. Mentoring and mentoring skills: Stages of formal mentoring relationships. Introduction to professionalism in healthcare practice. Communication and interpersonal skills. Introduction to general psychology and medical psychology. Counselling psychology in applied psychology. Definition, principles and application of effective communication skills in healthcare settings. The principles of Character Building and types of personality traits. Philosophical concepts of Character Building. Code of ethics and principles for various health professions. Case scenarios in health care and their ethical implications. Introduction to psychoactive substances and their clinical manifestations. Cultural perspectives and management strategies in psychoactive substance abuse.

**Minimum Academic Standards**

NUC-MAS requirement facilities.

Bayero University, Kano (BUK)

Clinical Sciences

Medicine and Dentistry

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BUK-COM 501 **Social and Traditional Practices Affecting Health in the Northwest Nigeria** (3 Units; Core; L = 30; P = 45)

**Senate-approved relevance**

Training of high-quality graduates who are highly knowledgeable and skilled in identifying and analysing the local social determinants and cultural risk factors influencing the health of the Hausa Speaking people living in the Northwest Geopolitical zone (NWGPZ) of Nigeria; in order to provide comprehensive healthcare services in the journey towards achieving universal health coverage (UHC). This is very much in agreement with BUK’s mission (as well as that of the World Health Organization), to holistically address the prevailing health and health system challenges of local populations where medical schools are domiciled. Relevance will be seen when culturally sensitive and social accountable medical graduates from BUK are able to identify and analyse socio-cultural and behavioural risk factors affecting health; and thereafter develop evidence-based interventions and treatments that are better suited to the health problems of the Hausa Speaking people of North West, Nigeria as they strive towards achieving the universal health coverage targets (UHC) of the Sustainable Development Goals (SDGs).

**Overview**

The holistic understanding of the factors that affect the health of individuals and populations will be incomplete without an appreciation of the physical, mental and social dimensions as espoused by the World Health Organization in its definition of health. The conventional (biomedical model) training of medical students typically incorporates and pays attention to the physical and mental dimensions affecting health, but typically neglects the socio-cultural and behavioural dimensions of health. Man is a social being and does not live in a vacuum, studies consistently show that people living in communities with high levels of social capital tend to have better health outcomes and indices. A systematic understanding of the social norms, behaviours, traditions, customs and social problems of any people is an important step that is useful in guiding health policy formulation, health programming as well as for providing comprehensive healthcare services. An evidence based and social accountable approach is well suited for combating the myriad of synergistic health and social ills afflicting the people of Northwest Nigeria as they strive towards achieving UHC. This brings to the fore the importance of imparting medical students with the knowledge and skills on how to identify local social & health needs and implement culturally acceptable solutions to the health problems of the society in their catchment/geographical area. We will train our medical graduates to have a systemic approach based on how both the biomedical and socio-environmental factors affect health so as to serve our society with holistic and high-quality health services within the framework of social accountability in medical education.

This course is designed to teach students how to identify prevailing social norms & related constructs, assess socio-cultural needs & behaviours and their relationship with health, and recognise the effect of local socio-cultural factors on health and healthcare seeking behaviour, conduct research using mixed methods research techniques as well as identify and analyse how cross cutting socio-cultural and environmental factors affect the causation and management of injuries, diseases and other medical conditions. The importance of the course lies in achieving the Health - Related Sustainable Development goals (SDGs) specifically SDG 3: *Ensure healthy lives and promoting well-being for all at all ages, underpinned by 13 targets that cover a wide spectrum of WHO's work*. However, it is important to note that almost all of the other 16 SDGs are directly related to health or will contribute to health indirectly. The objectives of the course, learning outcomes, and contents are provided to address this need.

**Objectives**

The objectives of the course are to:

* 1. Discuss the prevailing socio-environmental determinants including social norms & related constructs affecting health in the NWPZ.
  2. Explain the socio-cultural needs & behaviours and their relationship with health in the NWPZ.
  3. Describe the effect of local socio-cultural factors on health and healthcare seeking behaviour in the NWPZ.
  4. Show the harmful physical effects of some traditional practices on health of the population in NWPZ.
  5. Explain how cross cutting behaviours, socio-cultural and environmental factors affect the prevention, causation and management of injuries, diseases and other medical conditions in the NWPZ.

**Learning outcomes**

On completion of the course, students should be able to:

* 1. Define socio-cultural concepts, socio-environmental determinants and behaviours that influence health in Northwest GPZ.
  2. Recognise the importance of including the evidence base of local socio-cultural factors during health programming, implementation and evaluation in the Northwest GPZ.
  3. Apply cultural awareness & sensitivity in the evaluation of patient for medical treatment.
  4. Show the harmful physical effects of some traditional practices on health of the population in NWPZ.
  5. Analyse how cross cutting behaviours, socio-cultural and environmental factors affect the prevention, causation and management of injuries, diseases and other medical conditions in the NWPZ.

**Course contents**

Societal norms, mores, social accountability in health, indigenous health knowledge systems Local beliefs & practices (including myths and superstitions about the causes of diseases, Beliefs & practices regarding Burial practices, organ/cadaver donation/organ transplants, Health seeking behaviour &Mixed methods, Cultural programming, VVF homes, Orphanages, Prisons, Traditional Mental Homes, Local Healers/Rehab Homes (Dan gidan yan mari), Social Medicine Case Studies/Projects, History of traditional bone setting, methods and types of TBS, limitations and complications of TBS, recommended areas for improvement in TBS, traditional uvulectomy, couching, cupping, circumcision, traditional I&D, scarification marks, Ritual hot baths-social epidemiology, Aphrodisiacs- Social epidemiology of, Post Partum Psychosis, Post Partum blues, eclampsia (spirit possession), Emerging psychiatric sequalae due to internet addiction, . Ethnopharmacology/Hausa pharmacopoiea. Mental health policy/laws in Nigeria, traditional bloodletting procedures- social epidemiology, Traditional weaning practices & malnutrition - social epidemiology of, Traditional and cultural believes and practices for childhood neurologic conditions- Beliefs and practices on a child with delay milestones, Spirits, beliefs and practices to treat convulsions in children, Traditional adolescent health practices- Almajiri” system of schooling and their health and nutritional needs. The “Dan jagora” system. Denying Girl-child western education, Traditional and cultural Newborn care practices, Traditional cord-care practices, heat fomentation, toothpaste; Breast feeding initiation and pre-lacteal feeds; traditional herbal medicine for prevention and treatment of common conditions NNJ, dermatitis. Henna decoration on the Newborn.

**Minimum Academic Standards**

Laptops, modems, e-library/subscriptions, audio-visuals, lecture halls, means of transport to the communities.

Bayero University, Kano (BUK)

Clinical Sciences

Medicine and Dentistry

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BUK-MED 601 **Nephrology II** (2 units, Core, LH; 15; PH; 45)

**Senate-approved relevance**

Kidney diseases are increasing in both incidence and prevalence with rising morbidity and mortality worldwide. The burden of kidney diseases in our environment is not only increasing but is associated with certain peculiarities in its epidemiology and management. There is the need to produce doctors that are familiar with these peculiarities to be able to apply the knowledge acquired in bringing about the needed improvement in the management of kidney disease as well its prevention.

**Overview**

Appropriate understanding of common kidney diseases will allow for implementation of strategies to curve the menace of the disease through early detection and institution of appropriate management strategies in treatment and prevention. Patients with advanced kidney diseases leading to kidney failure need specific treatment in form of kidney replacement therapy which is not readily available and where available is very expensive beyond the reach of ordinary Nigerian. This course will equip the newly graduated medical doctor to recognize the kidney disease early and institute measures that will lead to reduction in mortality and morbidity from these diseases. The course will also equip the learners with modern prevention strategies for kidney diseases, identify those that need advanced care and prepare for early referral to where these services are available.

**Objectives**

**1. D**emonstrate sound theoretical knowledge of kidney diseases.

2. Display sound clinical skills in the evaluation of patient with kidney diseases.

3. Investigate patients with kidney disease and use the available results to plan for appropriate management strategy.

4. Demonstrate the knowledge and skills to institute preventive measures for common kidney diseases.

5. Identify risk factors at both individual and community level for kidney diseases.

6. Recognize patients that will require kidney replacement therapy and refer early to specialist.

**Learning Outcomes**

On completion of the course, students should be able to:

1. Exhibit ability to elicit clinical features in patients with kidney disease.
2. Investigate patients with kidney diseases with utmost prioritization.
3. Outline the principles of management of common renal diseases in our environment.
4. State preventive strategies for common kidney diseases as may be applicable.
5. Prepare and make at least one presentation on a selected topic in a seminar or tutorial.
6. Appraise kidney replacement therapy and properly prepare the patient for it.

**Course Contents**

Chronic Kidney Disease, aetiology, clinical manifestations, investigations, complications. Principles of management of CKD. Acute Kidney Injury, causes, presentations, diagnosis, complications, and management. kidney replacement Therapy. Haemodialysis. Peritoneal dialysis. kidney transplant. kidneys in systemic diseases. Acute interstial nephritis. Chronic interstitial nephritis. Tropical infections and the kidney. Obstructive nephropathy. Preventive Nephrology, applicattion of prevention medicine to Nephrology, primary prevention, secondary prevention. Tutorials in Nephrology. seminars in Nephrology. Clinical exposure to basic proceedures in Nephrology such as kidney biopsy, dialysis, central venous catheter insertion.

**Minimum Academic Standard**

Bayero University, Kano (BUK)

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BUK-MED 602 **Clinical Haematology and Oncology** (2 Units; Core, LH=45 PH= 45)

**Senate-approved relevance**

Nigeria has the largest burden of Sickle cell anemia. This is bound to increase, with the fastest growing population in the region. In addition, there is an increase in the incidence and prevalence of Haematological malignancies, partly due to improved diagnostic capacity, but also due to environmental and lifestyle changes that confer increased risk. The interactions with new and dynamic demographic, environmental and lifestyle factors with other new non communicable diseases alter disease presentation, management and prognosis.

**Overview**

Appropriate understanding of the variable presentation of Hematological diseases will enable prevention, early diagnosis and management of Haematological diseases, with the aim of reducing morbidity and mortality; and improving overall patients quality of life. It becomes imperative for medical graduates to have sufficient clinical proficiency in identifying important presentation and factors that will impact diagnosis, management and treatment of hematological diseases.

**Objectives**

**1.** Describe the Epidemiology, pathology and pathophysiology of hematological disorders; and how they translate to clinical presentations and outcomes.

2. Evaluate and interpret laboratory values in the context of patient’s clinical presentation and be able to differentiate between pathologies.

3. Develop a differential diagnosis based on clinical features and laboratory values.

4. Discuss the treatment protocols which are in place for hematology.

5. Discuss hematological manifestations of other systemic diseases.

**Learning Outcomes:**

1. Elicit clinical features in patients with Haematological diseases.

2. Investigate patients with Haematological diseases with utmost prioritization.

3. Manage of common Haematological diseases in our environment.

4. Relate Haematological presentation of systemic diseases.

5. Apply preventive strategies for common complications of Haematological diseases as may be applicable.

6. Prepare and make at least one presentation on a selected topic in a seminar or tutorial.

**Course content**

Introduction to the Haematopoietic system. Evaluation of haematopoietic system (HS). Definition of haematopoietic system. The components of HS (blood cells, the bone marrow, and lymphoid organs). Development of HS.Approach/Evaluation of patients with haematologic disorders.Anaemia. General approach to anaemia. Introduction. Definition of anaemia. Patient characteristics-age of patient-sex- race and ethnicity. Evaluation-history & physical examination. Laboratory evaluationcomplete blood count, haemoglobin and haematocrit, RBC indices, white blood count and platelet count, blood smear, Reticulocyte count. Haemoglobin electrophoresis. Clinical classification of Anemia. Pathological classification of anaemia, microcytic anaemia, normocytic anaemia, macrocytic anaemia, reticulocyte response. Confirmatory testing. Approach to anemia in other systemic diseases. Sickle cell disease and other haemoglobinopathies basic concept of SCD, definition, epidemiology. Pathogenesis/pathophysiology. Factors enhancing sickling. Haplotype. Sickle cell crises, vaso-occlusive pain episode, acute chest syndrome, stroke, hyper-haemolytic crisis, aplastic crisis, sequestration crisis, priapism, osteomyelitis, avascular necrosis, sickle cell nephropathy, sickle cell hepatopathy. Clinical presentation and treatment approach. New disease modifying medications treatment protocols. Overview of the role and indications of Stem cell transplant and Gene therapy in Sickle cell anemia. Acute leukaemias, acute lymphoblastic leukaemia, acute myeloid leukaemia. Classification of acute leukaemias integrating, morphology, cytochemistry, cytogenetics. Clinical features of acute leukaemia. Workup for patients for chemotherapy. Principles of induction, consolidation and maintenance cytotoxic chemotherapy, including attendant side effects. Outcomes of leukaemia according to classification, prognostic indices. Chronic leukaemias, Chronic lymphoblastic leukaemia, chronic myeloid leukaemia. Classification of chronic leukaemias integrating, morphology, cytochemistry, cytogenetics. Clinical features ans staging of chronic leukaemia. Principles of management/ cytotoxic chemotherapy, including attendant side effects. Outcomes of leukaemia according to classification, prognostic indices. Multiple myeloma and Plasma cell dyscrasias. Epidemiology, pathophysiology, Clinical features, laboratory features, treatment approach and protocols of patients with multiple myloma. Non- Hodgkin’s lymphoma. Epidemiology of cancer age-related incidence. Race-related incidence. Genetic factors. Chemical-related factors. Environmental factors. Clinical presentations, diagnosis and staging, treatment (chemotherapy, supportive care), prognosis, complications, late effects. Hodgkin’s lymphoma. Epidemiology of cancer age-related incidence. Race-related incidence. Genetic factors. Chemical-related factors. Environmental factors. Clinical presentations, diagnosis and staging, treatment (chemotherapy, supportive care), prognosis, complications, late effects. Deep Venous thrombosis Epidemiology, risk factors, Pathophysiology, clinical presentation, risk stratification, diagnosis and management of Deep Venous thrombosis, including Thrombophilia. Treatment protocols and clinical approach to a patient with suspected Deep Venous thrombosis. Pulmonary embolism Epidemiology, risk factors, Pathophysiology, clinical presentation, risk stratification, diagnosis and management of Pulmonary embolism. Treatment protocols and clinical approach to a patient with suspected. Pulmonary embolism. Overview and clinical approach to patients with Haemolytic Anemias, Overview and clinical approach to patients with Megaloblastic anemia, Overview and clinical approach to patients with Aplastic anemia and Bone marrow failure syndromes. Overview and clinical approach to Blood transfusion reactions. Overview and clinical approach to patients with bleeding disorders in other systemic diseases. Overview and clinical approach to patients with Myeloproliferative diseases.

**Minimum academic standard**

Expose students to emergency patient care at the Daycare and preparation of patients for chemotherapy. Students should observe and perform at least one procedure such as Bone Marrow Biopsy, exchange blood transfusion.

Bayero University, Kano (BUK)

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MED 603: **Rheumatology and Care of the Elderly II**, (2 Units; Core; LH=15; PH=45)

**Senate-approved Relevance**

As the quality of health in Nigeria is improving and increasingly more people grow older, this desirable trend will be accompanied by certain age-related medical disorders, hence the need to produce medical graduates that are oriented, competent, confident and communication skill-empowered, that will be capable of taking care of the existing and ever-growing needs of the elderly population. The BUK mission to address the expanding health needs of the Nigerian population is aligned with the training of high-quality medical graduates who are certified for efficient utilization of theoretical medical knowledge, affective skills, and communication skills within the framework of available resources. Peer teaching and peer-assisted learning in undergraduate medical programs have gained more attention internationally in recent years. One method of implementing this paradigm is through geriatric and rheumatology seminars conducted by students. Assessment of medical students' communication abilities during organized, problem-based seminars provide a special chance for learning and the development of critical thinking.

**Overview**

This course is designed to avail the medical student opportunity to learn basics of rheumatology and geriatric medicine and at the same time inculcate in them the confidence, ideal group dynamics and communication skills required for day-to-day interaction with patients, patients’ relations and the general populace. Besides, it will imbue in them the spirit of teamwork which is highly essential for a successful patient’s care in Nigeria and beyond.

**Learning objectives**

At the end of this course, students should be able to:

1. Describe the approach to a problem-based cases of Rheumatologic diseases.

2. Describe the approach to a problem-based cases of Geriatric patient.

3. Discuss the management and prevention of the diseases as may be applicable.

**Learning outcomes**

1. Demonstrate ability to approach a problem-based case of rheumatological conditions.
2. Communicate effectively to his colleagues on relevant rheumatological and geriatric conditions.
3. Prepare and make at least one presentation on a selected topic in a seminar or tutorial.
4. List and display sound clinical skills in the evaluation of the Rheumatologic patient.

**Course Contents**

Epidemiology of Rheumatic diseases, history taking and physical examination of the musculoskeletal system, pattern recognition of arthritis, early arthritis, synovial fluid analysis and interpretation, radio-diagnostics in musculoskeletal diseases (X-rays, USS, CT Scan, MRI, DEXA, etc.), septic arthritis, crystal arthropathies (gout, pseudo gout, etc.), soft tissue rheumatism (tennis elbow, golfer’s elbow, rotator cuff tendinitis, anserine bursitis, trochanteric bursitis, planter fasciitis, carpal tunnel syndrome, etc.), osteoporosis, Paget’s disease, drug uses in rheumatology (DMARDs, Biologics, small molecules etc.). Epidemiology of ageing, physiological changes caused by ageing, history taking in the elderly patient-special consideration, clinical assessment of the older people, introduction to the concept of comprehensive geriatric assessment, management of geriatric syndromes, falls, acute confusional state, incontinence, constipation, polypharmacy, models of the care of the elderly, management of common medical conditions in the elderly, disease prevention in the elderly, primary prevention, secondary prevention, tertiary prevention

**Minimum Academic Standards**

NUC-MAS requirement facilities.

Bayero University, Kano (BUK)

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BUK-SUR 601 **Minimal Access Surgery**, (2 Units; Core; L = 15; P = 45)

**Senate-approved relevance**

Training of high-quality medical graduates who are highly skilled and knowledgeable in the current novel surgical methods that are associated with minimal morbidity, pain and enhanced recovery. Relevance is seen in BUK graduates being able to be up to date with advanced technological methods in the practice of modern surgery and be able to compete with graduates of other university overseas.

**Overview**

Minimal access surgical techniques refer to surgical operations that are done through miniature incisions and very narrow surgical corridors achieved with the use of endoscopes, high-definition cameras and microscopes to provide access to the targeted lesions with minimal injury to surrounding structures. They have gradually become the gold standard in management of a wide array of surgical pathologies due to reduced morbidity, shortened duration of hospital stay, reduced risk of complications, and need for blood transfusion which are often associated with open procedures.

The Evolution of working-channel endoscopes and surgical instruments as well as innovation in surgical techniques have expanded the types of pathologies that can be addressed through minimally invasive approaches. In Nigeria, the techniques are rapidly evolving as the preferred and so called “computer” operations among the general population.

**Objectives**

The objectives of the course are to:

1. Describe the principles of minimal access surgery.
2. Describe the advantages of minimal access neurosurgery.
3. Describe the principles of laparoscopic surgery.
4. Describe the principles of endourology.
5. Demonstrate the use of the endoscope.

**Learning outcomes**

On completion of the course, students should be able to:

1. Identify basic instruments used in minimal access surgery and describe procedures in which they are used.

1. Describe at least three (3) procedures using minimal access surgery.
2. Identify the endoscope as a basic tool of minimal access surgery.
3. Show the advantages of minimal access procedures over open procedures.
4. Use endoscope for clinical examination

**Course contents**

Scope of Minimal Access Surgery. Principles of laparoscopic surgery. Laparoscopic Surgery in the diagnosis and treatment of Surgical conditions. Endourology. Renal tumours. Testicular tumours. Pelvi-ureteric Junction Obstruction. Neuro-endoscopy. Minimal Access Neurosurgery. Cranial endoscopy. Spinal endoscopy. Thoracoscopic surgery. Arthroscopy

**Minimum Academic Standards**

Operation theatre facilities with minimal access surgical instruments.