



**KADUNA STATE UNIVERSITY  
COLLEGE OF MEDICINE  
FACULTY OF CLINICAL SCIENCES**

**DEPARTMENT OF  
RADIOLOGY**

**STUDENT'S HANDBOOK**

**2023**

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## **PREFACE**

This is the sixth revised edition of the undergraduate handbook since the inception of the Department. This edition will provide basic information that the students need to know so as to succeed in their education pursuit.

The handbook has been enriched with more information on details of the courses that are required for the award of MBBS.

It is hoped that students will make maximum use of this document as a guide to get the best out of the department

Recommended books are also included in this edition.

This hand book shall be reviewed from time to time to accommodate changing trends and other new developments.

**Dr. Farouk Bilkisu**

**Head of Department (2023)**

**GENERAL INFORMATION**

**VISTOR AND PRINCIPAL OFFICERS OF THE UNIVERSITY**

**VISITOR**

His Excellency, Executive Governor of Kaduna State

Senator Uba Sani

**CHANCELLOR**

HH Muhammadu Sanusi II

**PRO-CHANCELLOR**

Mallam (Dr) Husaini Adamu Dikko

**VICE CHANCELLOR**

Professor Abdullahi Ibrahim Musa

**DVC (ACADEMIC)**

Professor Yusha'u Ango

**DVC (ADMINISTRATION)**

Professor Muhammad Bashir Ali

**DVC (STRATEGY, INNOVATION & SERVICE DELIVERY)**

Professor Helen Andow

**REGISTRAR**

Samira Balarabe, Esq

**BURSAR**

Hajiya Hauwa Muhammed Dalhat

**LIBRARIAN**

Dr Babangida Umar Dangani

## **Members of the Governing Council**

Mallam (Dr) Husaini Adamu Dikko	Chairman
Professor Abdullahi I. Musa (Vice Chancellor)	Member
Professor Yusha’u Ango (DVC Academic)	Member
Professor Muhammad Bashir Ali (DVC Admin)	Member
Professor Helen Andow (DVC Strategy, Innovation & Service Delivery)	Member
Dr. Abdulkadir M. Meyere	Member
Mal. Habibu Sani	Member
Mrs Charity U. Shekari	Member
Dr. Sanusi A. Ismaila	Member
Dr. Haliru M. Soba (PS, MOE)	Member (Ex-Officio)
Mal. Habib Lawal (PS, MOF)	Member (Ex-Officio)
Professor Helen A. Andow (Rep Senate)	Member
Professor Sadiq G. Abdu (Rep Senate)	Member
Mrs Florence Suleman (Rep Congregation)	Member
Samira Balarabe, Esq (Registrar)	Secretary to the Council

# Introduction

What Radiology is all about?

Radiology is both an academic and professional branch of medicine that encompasses both diagnostic and therapeutic branch of Medicine. Though medicine is as old as man, radiology evolved just over a century ago. This brought about a revolution in the practice of medicine, thereby making life easier for both the doctors and patients.

Basically, Radiology is the use of x-ray and other waveforms to achieve diagnosis and treatment. It has the following branches:

- Radio-Diagnostic                      Nuclear medicine
- Radiotherapy
- Interventional

As you come into the department for the postings, you will discover that there are many sub-specialities within the field of study.

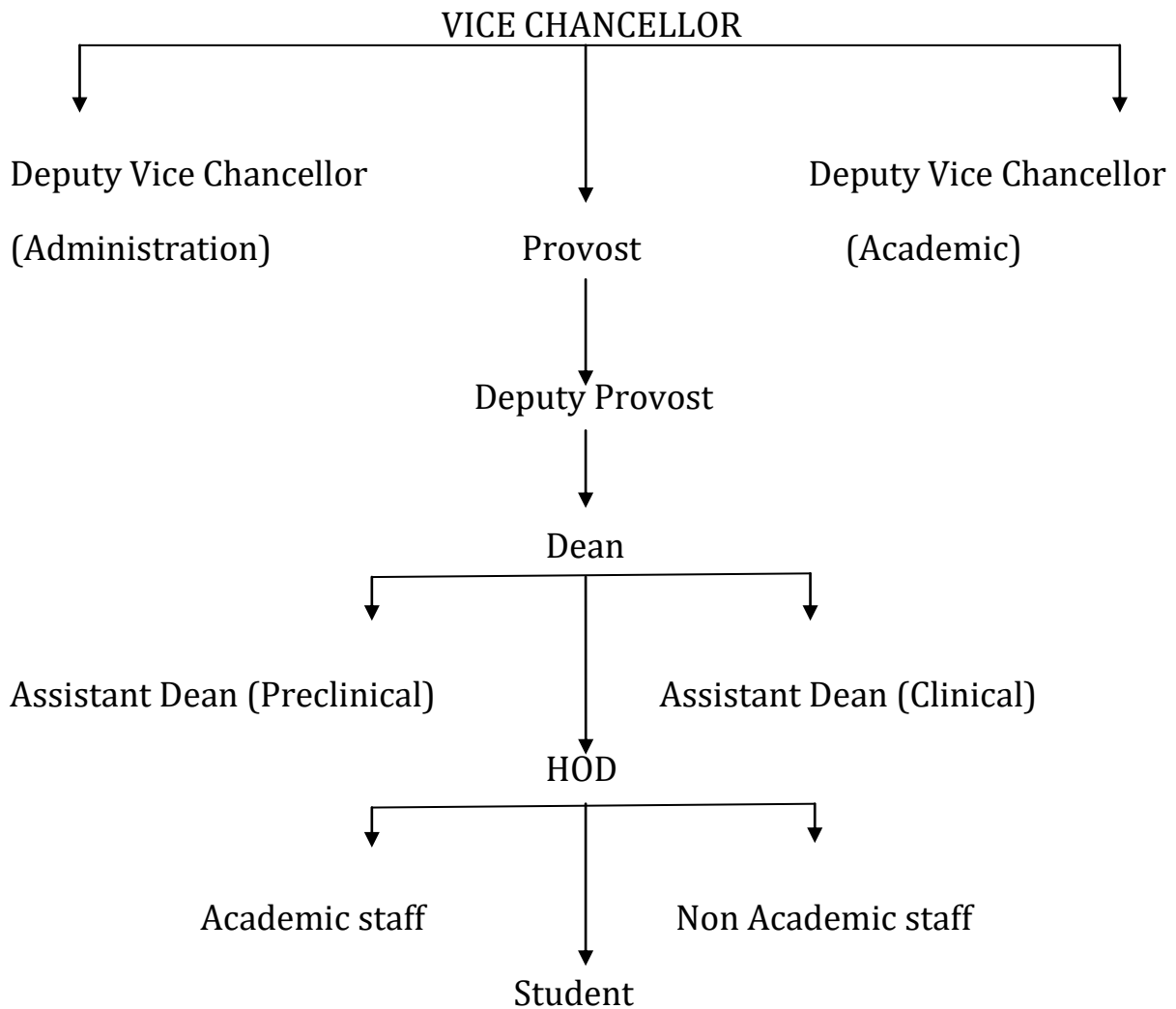
There is this saying that the Radiologist is the doctor's doctor, since he/she required to know 'something' in all fields of medicine and many doctors depend on him/she for a way forward.

The Objective of the training at this level is to:

- a. Acquaint the student with what radiology is all about.
- b. Teach the student on how to inculcate diagnosis into the management of their patients.
- c. Equip the student with adequate knowledge on how to use the modalities of investigation for the appropriate illness/diseases.

## ORGANISATION OF THE DEPARTMENT/ORGANOGRAM

The Head of Department (HOD) is appointed by the Vice Chancellor. He/She oversees the affairs of the department and reports to the dean of the Faculty of Clinical Sciences. The HOD is responsible for the efficient running of the department as a whole, assigning duties to staff.



## STAFF LIST

Staff of the Department are either Academic, Technical, Administrative or Supporting Staff. They are also University or Teaching Hospital Staff.

### ACADEMIC STAFF

S/N	Names	Qualification	Sub-Speciality	Rank	Status
1	Prof A.M Tabari	MBBS 1992 (ABU), FMCR,2003 FICS, 2016	Vascular & Interventional Radiology	Professor	Tenure
2	Dr T.S Baduku	MBBS,1987 (ABU) FWACS,1999 FMCR,1999 FICS	Breast & paediatric Radiology	Senior Lecturer	Tenure
3	Dr John Sheyin	MBBS,1992 (UNIJOS) FMCR, 2014	Neuroradiology & General Radiology	Lecturer I	Tenure
4	Dr B. U. Farouk	MBBS, 2007 (UNIMAID) FWACS, 2017	Neuroradiology & Non-vascular Intervention	Lecturer I	Tenure
4	Dr H. Theyra-Enias	MBBS, 2008 (ABU) FWACS, 2016 FMCR, 2018	Clinical and Radiation Oncology	Lecturer I	Tenure
5	Dr Mukhtar Usman	MBBS,2002 (UNIMAID), FMCR, 2018	Nuclear medicine, Interventional & Musculoskeletal Radiology	Hospital Consultant	Full-time BDTH

### RESIDENT DOCTORS

S/N	Names	Qualification	Rank	Status
2	Dr. Aisha Abubakar	MBBS	Resident	Tenure with BDTH



	Suleiman			
5	Dr. Chatjok Jeremiah David	MBBS	Resident	Tenure with BDTH
6	Dr. Fatima Saleh Bade	MBBS	Resident	Tenure with BDTH
7	Dr Fatima Dahiru	MBBS	Resident	Tenure with BDTH
8	Dr Fatima Mamadi	MBBS	Resident	Tenure with BDTH
9	Dr Wakili Ali Garba	MBBS	Resident	Tenure with BDTH

<b>ADMIN STAFF</b>				
S/N	Names	Qualification	Rank	Status
1	Benjamin Garba	B.A Literature	Admin Officer	Tenure
<b>TECHNICAL/NON ACADEMIC STAFF</b>				
1	Rashida S. I	B.Rad	Assistant Chief Radiographer	Tenure with BDTH
2	Adamu Mohammad Yunusa	B.Rad	Snr Radiographer	Tenure with BDTH
3	Fatima K. Alkali	B.Rad	Radiographer I	Tenure with BDTH
4	Mubarak Nasir Isa	B.Rad	Radiographer I	Tenure with BDTH
5	Rabi Kabiru Mado	B.Rad	Radiographer I	Tenure with BDTH
6	Sadiya Musa Aliyu	B.Rad	Radiographer I	Tenure with BDTH
7	Yakubu Musa Adamu	B.Rad	Radiographer I	Tenure with BDTH
8	Mustapha A. N	*		
9	Sani S. Abdullahi	B.Rad	Radiographer I	Tenure with BDTH
10	Abdullahi H.	B.Rad	Radiographer I	Tenure with BDTH
11	Aisha Maina	B.Rad	Radiographer I	Tenure with BDTH
12	Aliyu Shehu	Dip XrayTech	Higher Xray Tech	Tenure with BDTH
13	Rabi Uba Ahmed	Dip XrayTech	Principal Xray Tech	Tenure with BDTH
14	Elizabeth Bityong	Dip XrayTech	Principal Xray Tech	Tenure with BDTH
15	Jamila Adamu	Dip XrayTech	Principal Xray Tech	Tenure with BDTH
16	Rahama M	Dip XrayTech	Principal Xray Tech	Tenure with BDTH
17	Hannatu D.	Dip XrayTech	Principal Xray Tech	Tenure with BDTH
18	Blessed Elisha Usman	Dip XrayTech	Tech	Tenure with BDTH
19	Ramatu Yunus	Dip XrayTech	Tech	Tenure with BDTH

20	Makiyyu Haruna	Dip XrayTech	Tech	Tenure with BDTH
21	Maimuna Muhammad	Dip XrayTech	Tech	Tenure with BDTH
22	Maryam Adamu	Dip XrayTech	Tech	Tenure with BDTH
23	Hafsat Sani Ustaz	Dip XrayTech	Tech	Tenure with BDTH
24	Mohammed Khalifa	Dip XrayTech	Tech	Tenure with BDTH
25	Mohammed Mubashir	Dip XrayTech	Tech	Tenure with BDTH
26	Bilkisu Muhammed Bello	Dip XrayTech	Tech	Tenure with BDTH
27	Sadiya S Umar	Dip XrayTech	Tech	Tenure with BDTH
<b>NURSING STAFF</b>				
1	Safiya Tabari	RN	Nursing Officer I	Tenure with BDTH
2	Adamu Haruna	HND	Hosp Attendant	Tenure with BDTH
3	Martina	HND	Hosp Attendant	Tenure with BDTH
4	Patience Ene Ogebe	SSCE	Hosp Attendant	Casual staff with BDTH
5	Binta Umar Tanko	SSCE	Hosp Attendant	Casual staff with BDTH

## LIST OF EQUIPMENT

S/N	ITEMS	QUANTITY
1	MRI Machine (Hitachi 0.3T)	1
2	CT Machine (GE 32 slice)	1
3	Mobile X-ray Machine	1
4	Mammography Machine	1
5	Conventional static X-ray Machine	2
6	Fluoroscopy Machine with spot film Device	1
7	CR Machine (Digitizer)	1
8	Ultrasound Machines with Doppler and Echocardiography Facilities.	5

## **SERVICES RENDERED**

1. All forms of conventional X-rays
2. Ultrasound exams including:
  - a. General purpose abdominopelvic scans including detailed hepatic and renal assessment.
  - b. Obstetric scans including anomaly scans, 3D, 4D and foetal Doppler.
  - c. Transvaginal scans including follicular tracking.
  - d. Urological scans with transrectal prostate scans.
  - e. Small parts USS including thyroid, breast, scrotal and soft tissue scans.
  - f. Musculoskeletal USS for joint effusions and tendon tears.
  - g. Transfontanelle USS.
  - h. USS-guided interventions (Cyst/abscess drainage, biopsies, central line and chest tube insertions).
3. Doppler US
  - a. Upper limb (Arterial and Venous)
  - b. Lower limb (Arterial and Venous)
  - c. Carotid Doppler
  - d. Transcranial Doppler (TCD)
  - e. Foetal MCA Doppler
  - f. Umbilical Artery Doppler
  - g. Echocardiography
4. Special investigations
  - a. Hysterosalpingography (HSG)
  - b. Retrograde Urethrography (RUG)
  - c. Micturating Cystouethrography (MCUG)
  - d. Fistulogram
  - e. Intravenous Urography (IVU)
  - f. Barium Studies
5. CT/MRI of all parts of the body including MR myelography
6. Mammography

## **Programme Objectives**

### 500L

There shall be a posting in radiology for a minimum of 2 weeks. This is because a student at this level would have gone round the other departments at least, in order to appreciate the application of radiology to the diagnosis of the different ailments. During this posting, there shall be lectures in the morning (8-10am), followed by the clinic posting between (10-4pm). These clinics include posting to film reporting room, Ultrasound room, special procedure sessions, CT and MRI rooms as well as Oncology clinics and Chemotherapy sessions. In the evening hours, there shall be film review sessions, tutorials and discussions (8-10pm).

A log book shall be filled by every student after every class or clinic session which shall be signed by the lecturer. Every student is expected to participate in ALL programmes.

At the end of the posting, there shall be an examination which contributes to the student's continuous assessment in Surgery.

Topics to be covered include (but not exclusive) the following:-

1. Emergency Radiology.
2. Surgical Radiology.
3. Medical Radiology
4. Paediatric Radiology.
5. O/G Radiology.
6. Radiology of small body parts.
7. Breast Radiology.
8. Special Procedures.

9. Neuroradiology.
10. Interventional Radiology.
11. Clinical and Radiation Oncology.

There shall be two hours of radiology lectures per week for students posted to paediatric and Obstetrics/Gynaecology departments. These lectures are part of these postings.

### Paediatric Radiology

1. Introduction to paediatric Radiology and its peculiarities
2. Radiology of inherited diseases.
3. Chest radiology.
4. Abdominal radiology.
5. Paediatric neuroradiology.
6. Radiotherapy in paediatrics.

### Obstetrics and Gynaecology

1. Introduction to radiology of the female organs.
2. Modalities of imaging in women
3. Investigation of pelvic diseases
4. Fertility investigations
5. Obstetric diagnosis/monitoring of fetus
6. The role of the radiologist in cancer therapy
7. Radiotherapy of female diseases.

### 600L

Student will receive Radiology lectures based on systems covered during their senior postings in medicine and surgery.

**COURSE CODE, COURSE TITLE AND CREDIT UNITS**

<b>COURSE CODE RDL</b>	<b>COURSE TITLE</b>	<b>CREDIT UNITS</b>
RADL 401	Introductory Radiology In Medicine	2
402	Imaging Techniques In Surgery	2
403	Principles Of Interventional Radiology	2
501	Introductory Radiology in Obs and Gynae	2
502	Introductory Radiology In Paediatrics	2
503	Introduction And Overview of Radiology	3
504	Neuro/ENT Radiology	3
505	Chest Radiology	3
506	Cardiovascular Radiology	3
507	Gastrointestinal Radiology	3
508	Genitourinary Radiology	3
509	Radiology Of Small Parts	3
510	Musculoskeletal Radiology	3
511	Recent Advances in Radiology	3
512	Film Reporting Clinic: Chest Musculoskeletal Cardiology Abdomen CNS/Spine	3
513	CT scan Clinic: CNS Chest Abdomen Genitourinary Hepatobiliary Musculoskeletal	3
514	Ultrasound Clinic: Abdomen Hepatobiliary Genitourinary Small parts	3
515	MRI Clinic: CNS Abdomen Genitourinary Musculoskeletal	3

516	Special Radiographic Investigation : Intravenous Urography Retrograde Urethrogram Micturicting Cystourethrogram Barium Studies	3
517	-Definition of Radiotherapy -Units Of Measurement -Types of Radiotherapy -Classification Of Cancers -Aetiology of Cancers	3
518	-Common Examples of Cancers In Our Environment And Available Treatment Modalities -Staging of Cancers -Challenges Of Cancer Treatment In Our Environment -Radiation Protection	3
519	-Cancer Biology -Side Effects/Complication of Radiotherapy -Principles Of Chemotherapy Including Classes And Side Effects	3
520	-Classification Of Radiation -Mechanisms Of Cell Kill by Radiation -Production Of X and gamma rays -Radiotherapy Equipment	3
521	Call duty	3
522	Seminar presentations	3
<b>TOTAL</b>	<b>25</b>	<b>70</b>

#### PROGRAMME OUTLINE DURING THE BLOCK POSTING

	10-4PM ONCOLOGY CLINIC /CHEM	10-4PM USS/D OPPLER	10-4PM FILM/ MAMMOGRAPHY	10-4PM FLOUROSCOPY	10-4PM MRI	10-4PM CT	10-4PM INTERVENTIONAL RAD	8-10PM TUTORIALS
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**SPECIAL INVESTIGATION WATCHED**

ECHOCARDIOGRAPHY					
IVU					
BARIUM SWALLOW/MEAL					
BARIUM EMEMA					
HYSTEROSALPINGOGRAM					
URETHROGRAM CYSTO-URETHROGRAM					
ULTRASOUND/DOPPLER					
COMPUTER TOMOGRAPHY(CT)					
MRI					
CT/MR ANGIOGRAPHY					
INTERVENTIONAL RADIOLOGY					
MAMMOGRAPHY					
OTHERS					



## **RECOMMENDED TEXTBOOKS**

1. The Medical Student's Guide to the Chest Film. Editor Edwin F . Donnelly, MD, Phd.
2. Radiology Text book for Medical Students. Editor ; David Sutton.
3. Applied Radiological Anatomy for Medical Students. Editors Paul Butler; Adam W M Mitchell; Harold Ellis
4. Radiology for Medical Students. Editor: Kenneth C. Eze.