AOU Medicine & Surgery — Lecturer Handbook (Part I)

MBBS · MDCN pathway · OBE, schemes of work, course-file & CLO–HPO mapping

AKPAKIP ORO UNIVERSITY (AU)

Oro Nation, Akwa Ibom State, Nigeria

FACULTY OF MEDICAL SCIENCES

DEPARTMENT OF MEDICINE AND SURGERY

LECTURER HANDBOOK

PART I

MBBS Medicine and Surgery

Leading to Provisional Registration with the Medical and Dental Council of Nigeria (MDCN)

Teaching Schedule, Scheme of Work, Course-File and Outcome-Mapping Requirements

Curriculum Framework: NUC CCMAS + AU Institutional Curriculum, aligned to World Federation for Medical Education (WFME) global standards | Quality Framework: Outcome-Based Education (OBE)

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A. Quality Framework, Programme Educational Objectives and Programme Outcomes

A.1 Accreditation and Quality Framework

This handbook is prepared to meet the Nigerian Universities Commission (NUC) Core Curriculum and Minimum Academic Standards (CCMAS), and is additionally structured to prepare graduates for registration with the Medical and Dental Council of Nigeria (MDCN) and alignment with World Federation for Medical Education (WFME) global standards.

Delivery follows Outcome-Based Education (OBE): every course, weekly topic and assessment you set must be traceable to stated Course Learning Outcomes (CLOs) and, in aggregate, to the Programme Outcomes (HPO1-HPO12) listed below. You are responsible for demonstrating this traceability in your course file (Section E).

A.2 Programme Educational Objectives (PEOs)

Within three to five years of graduation, graduates of the Department are expected to:

PEO1: Apply biomedical, behavioural and clinical sciences to diagnose and manage common and emergency medical and surgical conditions encountered in Nigeria and internationally.

PEO2: Attain provisional and full registration with the Medical and Dental Council of Nigeria (MDCN) and progress through internship into medical practice, specialisation, or postgraduate study.

PEO3: Practise medicine with integrity, compassion and ethical judgement grounded in the Oro (Oron) Nation's and wider African cultural values of dignity, empathy, inclusion and justice.

PEO4: Deliver preventive, curative and rehabilitative care responsive to the health needs of Niger Delta and Gulf of Guinea communities, including tropical and occupational conditions.

PEO5: Engage in continuous, life-long learning, audit and the responsible application of digital and AI-enabled tools in clinical decision-making throughout a medical career.

A.3 Programme Outcomes (HPO1-HPO12)

Your teaching, assessment design and CLOs must collectively build toward the following twelve outcomes:

No.

Outcome

Description

HPO1

Scientific and Clinical Knowledge

Apply the foundational biomedical, behavioural and clinical sciences relevant to the profession to safe, competent practice.

HPO2

Clinical/Professional Skills and Procedures

Perform the clinical, technical or professional procedures expected of a competent entry-level practitioner.

HPO3

Patient/Client-Centred Communication

Communicate effectively and compassionately with patients, clients, families and communities, respecting their autonomy and dignity.

HPO4

Professionalism and Ethics

Practise with integrity, accountability and adherence to professional codes of ethics and regulatory requirements.

HPO5

Population, Public and Community Health

Apply knowledge of population health, epidemiology and preventive practice to community and public health challenges.

HPO6

Evidence-Based Practice and Research

Critically appraise and apply research evidence to inform practice, and conduct basic research under supervision.

HPO7

Interprofessional Collaboration and Teamwork

Function effectively as a member of multidisciplinary healthcare and research teams.

HPO8

Health Systems, Management and Leadership

Understand the organisation, financing and management of health systems, including resource-limited settings.

HPO9

Cultural Competence and Health Equity

Practise with cultural sensitivity and attention to health equity, particularly within Niger Delta and Gulf of Guinea communities.

HPO10

Health Informatics and Digital Technology

Use health information systems and digital/AI-enabled tools responsibly to support practice and decision-making.

HPO11

Patient Safety and Quality Improvement

Apply patient/client safety principles and participate in continuous quality improvement.

HPO12

Life-Long Learning and Professional Development

Engage in continuous, reflective, life-long learning and professional development.

A.4 How to Use This Handbook

Use the semester scheme in Part B as the minimum teaching framework for every course you teach, and develop a full course file per Section E.

A.5 Credit Unit and Grading Convention

One (1) credit unit is equivalent to one hour of lecture/tutorial contact per week, or two-to-three hours of laboratory/clinical contact per week, over a fifteen-week semester; clinical posting units are weighted for the intensity of ward-based supervision. Your indicative total load across the twelve-semester programme is approximately 220-240 credit units, consistent with the length and intensity of medical training. Early and later clinical exposures are compulsory, logged, and graded Pass/Fail where indicated. Continuous assessment (OSCEs, case presentations, logbooks, tests) typically makes up 30-50% of your grade depending on the course, with the balance from end-of-semester or professional examinations.

MBBS Medicine and Surgery

Delivered by the Department of Medicine and Surgery, Faculty of Medical Sciences, leading to provisional registration with the Medical and Dental Council of Nigeria (MDCN) on successful completion of internship.

Programme Emphasis

The programme trains physicians competent in clinical medicine and surgery, grounded in community and preventive health, meeting MDCN requirements and aligned with World Federation for Medical Education (WFME) global standards, with particular attention to the health needs of the Niger Delta and Gulf of Guinea.

Curriculum Structure — Semester-by-Semester Summary

Semester

Level

Academic Theme

Semester 1

100 Level, First Semester

Pre-Clinical Foundation I

Semester 2

100 Level, Second Semester

Pre-Clinical Foundation II

Semester 3

200 Level, First Semester

Basic Medical Sciences I

Semester 4

200 Level, Second Semester

Basic Medical Sciences II

Semester 5

300 Level, First Semester

Para-Clinical Sciences I

Semester 6

300 Level, Second Semester

Para-Clinical Sciences II

Semester 7

400 Level, First Semester

Clinical Foundations and Posting I

Semester 8

400 Level, Second Semester

Clinical Posting II

Semester 9

500 Level, First Semester

Clinical Rotations I

Semester 10

500 Level, Second Semester

Clinical Rotations II

Semester 11

600 Level, First Semester

Final Clinical Year I

Semester 12

600 Level, Second Semester

Final Qualifying Preparation and Professional Readiness

Semester 1 — 100 Level, First Semester

Academic Theme: Pre-Clinical Foundation I

Registered Courses

Code

Course Title	Units	Status	Prerequisite
GST 101	Communication in English I	2	C	None
GST 103	Nigerian Peoples and Culture	2	C	None
BIO 101	General Biology I	3	C	None
CHM 101	General Chemistry I	3	C	None
PHY 101	General Physics I	3	C	None
STA 101	Introductory Biostatistics I	2	C	None
MED 101	Introduction to Medicine and the Health Professions	1	C	None
Total Units This Semester			

16

Weekly Teaching Scheme of Work

Weeks

Topics / Learning Activities

Focus

Foundational biology, chemistry, physics and biostatistics for medical science; orientation to the medical profession and its ethics.

Coursework Requirements

Biology/chemistry/physics problem sets and practicals

Biostatistics exercises

Career reflection essay

Semester 2 — 100 Level, Second Semester

Academic Theme: Pre-Clinical Foundation II

Registered Courses

Code

Course Title

Units

Status

Prerequisite

GST 102

Communication in English II

2

C

GST 101

GST 104

Use of Library, Study Skills and ICT

1

C

None

BIO 102

General Biology II (Genetics)

3

C

BIO 101

CHM 102

Organic Chemistry

3

C

CHM 101

PHY 102

General Physics II

2

C

PHY 101

MED 102

Medical Sociology and Behavioural Science

2

C

None

STA 102

Introductory Biostatistics II

2

C

STA 101

Total Units This Semester

15

Weekly Teaching Scheme of Work

Weeks

Topics / Learning Activities

Focus

Genetics; organic chemistry relevant to biochemistry; behavioural science; further biostatistics.

Coursework Requirements

Genetics problem sets

Organic chemistry practicals

Behavioural science case study

Semester 3 — 200 Level, First Semester

Academic Theme: Basic Medical Sciences I

Registered Courses

Code

Course Title

Units

Status

Prerequisite

MED 201

Human Anatomy I (Gross Anatomy — Upper Limb and Thorax)

4

C

BIO 102

MED 203

Human Physiology I

4

C

BIO 102

MED 205

Medical Biochemistry I

3

C

CHM 102

MED 207

Medical Ethics and Professionalism I

1

C

None

MED 209

Histology

2

C

MED 201

MED 291

Early Clinical Exposure I

0

C

Pass/Fail, logged

Total Units This Semester

14

Weekly Teaching Scheme of Work

Weeks

Topics / Learning Activities

Focus

Gross anatomy of the upper limb and thorax; physiological systems; biochemical pathways; professionalism; introductory hospital exposure.

Coursework Requirements

Anatomy dissection/practical reports

Physiology lab reports

Biochemistry practicals

Reflective ethics essay

SIWES

Early Clinical Exposure introduces students to hospital wards and patient contact under supervision.

Semester 4 — 200 Level, Second Semester

Academic Theme: Basic Medical Sciences II

Registered Courses

Code

Course Title

Units

Status

Prerequisite

MED 202

Human Anatomy II (Abdomen, Pelvis and Lower Limb)

4

C

MED 201

MED 204

Human Physiology II

4

C

MED 203

MED 206

Medical Biochemistry II

3

C

MED 205

MED 208

Neuroanatomy

2

C

MED 201

MED 210

Embryology and Medical Genetics

2

C

BIO 102

Total Units This Semester

15

Weekly Teaching Scheme of Work

Weeks

Topics / Learning Activities

Focus

Abdominal, pelvic and lower limb anatomy; renal/endocrine/reproductive physiology; metabolic biochemistry; neuroanatomy; embryology and genetics.

Coursework Requirements

Anatomy practicals

Physiology lab reports

Biochemistry assignment

Neuroanatomy case study

Semester 5 — 300 Level, First Semester

Academic Theme: Para-Clinical Sciences I

Registered Courses

Code

Course Title

Units

Status

Prerequisite

MED 301

General Pathology

3

C

MED 206

MED 303

Medical Microbiology I

3

C

MED 206

MED 305

Pharmacology I

3

C

MED 204

MED 307

Human Anatomy III (Head and Neck)

3

C

MED 208

MED 309

Immunology

2

C

MED 206

MED 391

Early Clinical Exposure II

0

C

Pass/Fail, logged

Total Units This Semester

14

Weekly Teaching Scheme of Work

Weeks

Topics / Learning Activities

Focus

Cell injury and disease processes; bacteriology fundamentals; pharmacokinetics/dynamics; head and neck anatomy; immune system.

Coursework Requirements

Pathology practicals

Microbiology lab reports

Pharmacology problem sets

Anatomy practicals

Semester 6 — 300 Level, Second Semester

Academic Theme: Para-Clinical Sciences II

Registered Courses

Code

Course Title

Units

Status

Prerequisite

MED 302

Systemic Pathology

3

C

MED 301

MED 304

Medical Microbiology II (Parasitology and Virology)

3

C

MED 303

MED 306

Pharmacology II

3

C

MED 305

MED 308

Community Health and Preventive Medicine I

3

C

MED 102

MED 310

Haematology and Blood Transfusion Science

2

C

MED 204

Total Units This Semester

14

Weekly Teaching Scheme of Work

Weeks

Topics / Learning Activities

Focus

Organ-system pathology; parasitology and virology relevant to the Niger Delta; clinical pharmacology; preventive medicine and community health; haematology.

Coursework Requirements

Systemic pathology practicals

Parasitology/virology lab reports

Pharmacology assignment

Community health field report

Semester Project: "Community Health Survey"

Students conduct a supervised basic health survey of a nearby community, reporting on common conditions and preventive needs.

Semester 7 — 400 Level, First Semester

Academic Theme: Clinical Foundations and Posting I

Registered Courses

Code

Course Title

Units

Status

Prerequisite

MED 401

Introduction to Clinical Medicine (Propaedeutics)

3

C

MED 310

MED 403

Community Health and Preventive Medicine II

2

C

MED 308

MED 405

Medical Jurisprudence and Ethics II

1

C

MED 207

MED 407

Clinical Posting — Internal Medicine I

4

C

MED 401

MED 409

Clinical Posting — Surgery I

4

C

MED 401

Total Units This Semester

14

Weekly Teaching Scheme of Work

Weeks

Topics / Learning Activities

Focus

History-taking and clinical examination skills; medical jurisprudence; supervised clinical postings in medicine and surgery wards.

Coursework Requirements

Clinical clerking logbook

Case presentations

Posting assessment (OSCE-style)

SIWES

Students undertake supervised ward-based clinical postings; attendance and case logs are compulsory.

Semester 8 — 400 Level, Second Semester

Academic Theme: Clinical Posting II

Registered Courses

Code

Course Title

Units

Status

Prerequisite

MED 402

Clinical Posting — Paediatrics

4

C

MED 407

MED 404

Clinical Posting — Obstetrics and Gynaecology

4

C

MED 407

MED 406

Clinical Posting — Psychiatry

3

C

MED 401

MED 408

Clinical Posting — Family Medicine and Community Health

3

C

MED 403

Total Units This Semester

14

Weekly Teaching Scheme of Work

Weeks

Topics / Learning Activities

Focus

Supervised clinical postings in paediatrics, obstetrics and gynaecology, psychiatry, and family/community medicine.

Coursework Requirements

Clinical clerking logbooks

Case presentations

Posting assessments

Semester 9 — 500 Level, First Semester

Academic Theme: Clinical Rotations I

Registered Courses

Code

Course Title

Units

Status

Prerequisite

MED 501

Clinical Posting — Internal Medicine II

4

C

MED 402

MED 503

Clinical Posting — Surgery II

4

C

MED 404

MED 505

Clinical Posting — Anaesthesia

2

C

MED 503

MED 507

Clinical Posting — Radiology

2

C

MED 501

MED 509

Research Methods and Project I

2

C

None

Total Units This Semester

14

Weekly Teaching Scheme of Work

Weeks

Topics / Learning Activities

Focus

Advanced medicine and surgery postings; anaesthesia and radiology exposure; research methodology for the final-year project.

Coursework Requirements

Clinical clerking logbooks

Case presentations

Research proposal

Semester 10 — 500 Level, Second Semester

Academic Theme: Clinical Rotations II

Registered Courses

Code

Course Title

Units

Status

Prerequisite

MED 502

Clinical Posting — Orthopaedics

3

C

MED 503

MED 504

Clinical Posting — Ear, Nose and Throat (ENT)

2

C

MED 501

MED 506

Clinical Posting — Ophthalmology

2

C

MED 501

MED 508

Clinical Posting — Public Health Practice

3

C

MED 403

MED 510

Research Project II

3

C

MED 509

Total Units This Semester

13

Weekly Teaching Scheme of Work

Weeks

Topics / Learning Activities

Focus

Orthopaedics, ENT and ophthalmology postings; applied public health practice; research project data collection and analysis.

Coursework Requirements

Clinical clerking logbooks

Posting assessments

Research project draft report

Semester 11 — 600 Level, First Semester

Academic Theme: Final Clinical Year I

Registered Courses

Code

Course Title

Units

Status

Prerequisite

MED 601

Advanced Internal Medicine

4

C

MED 501

MED 603

Advanced Surgery

4

C

MED 503

MED 605

Advanced Obstetrics and Gynaecology

4

C

MED 404

MED 607

Advanced Paediatrics

3

C

MED 402

Total Units This Semester

15

Weekly Teaching Scheme of Work

Weeks

Topics / Learning Activities

Focus

Final-year consolidation postings in internal medicine, surgery, obstetrics/gynaecology and paediatrics, with increasing clinical responsibility under supervision.

Coursework Requirements

Clinical clerking logbooks

Case presentations

Mock OSCE assessments

Semester 12 — 600 Level, Second Semester

Academic Theme: Final Qualifying Preparation and Professional Readiness

Students select one elective clinical posting area: (A) Internal Medicine subspecialties, (B) Surgery subspecialties, (C) Obstetrics and Gynaecology, or (D) Community/Public Health Medicine.

Registered Courses

Code

Course Title

Units

Status

Prerequisite

MED 602

Elective Clinical Posting (choose track A, B, C or D)

4

E

Declared pathway

MED 604

Final Professional Examination Preparation

2

C

None

MED 606

Internship Readiness and Professional Practice

2

C

MED 405

MED 608

Community-Based Medical Education Project (Oron Nation Health Needs Assessment)

3

C

MED 508

MED 699

Final Qualifying Examination

0

C

Pass/Fail

Total Units This Semester

11

Specialisation / Pathway Options

Code

Option Title

A

Internal Medicine Subspecialties

B

Surgery Subspecialties

C

Obstetrics and Gynaecology

D

Community/Public Health Medicine

Weekly Teaching Scheme of Work

Weeks

Topics / Learning Activities

Requirements

Complete elective posting; sit mock and final qualifying examinations (written, clinical and oral/viva); complete and present the community-based health needs assessment project; prepare for internship.

Graduation Portfolio Requirements

Transcript

Clinical logbooks across all postings

OSCE and clinical examination results

Research project report

Final qualifying examination results

Internship readiness record

D. Common Teaching and Assessment Schedule

A normal fifteen-week teaching semester shall generally follow:

Week(s)

What Happens

Week 1

Orientation / course introduction.

Weeks 2-5

Core theory and guided tutorials.

Week 6

Continuous assessment / test.

Weeks 7-10

Advanced theory plus laboratory/clinical/practical activities.

Week 11

Practical/coursework assessment.

Weeks 12-13

Integrated case-based/problem-based learning.

Week 14

Revision and case presentations.

Week 15

Final revision / course completion.

Examination period

As separately published by the University.

D.1 Coursework Principle

Every course should normally contain a balanced combination of individual assignments, group problem-solving, tutorials, laboratory/clinical/practical work, quizzes/tests, case studies, technical reports and presentations. Lecturers shall not rely exclusively on final examinations.

E. Lecturer Course-File Requirement

For every course, you shall compile and maintain a course file containing:

Course specification (aims, CLOs, credit load, contact hours).

Course Learning Outcomes (CLOs), mapped to Programme Outcomes (HPO1-HPO12).

Weekly scheme of work.

Lecture materials.

Tutorial questions.

Practical/clinical/laboratory manual, where applicable.

Assignment questions.

Quiz/test instruments.

Examination paper.

Marking scheme.

Attendance record.

Student feedback.

CLO attainment analysis.

HPO mapping evidence.

Course review report.

F. Student Weekly Study Model (For Lecturer Awareness)

Maintain a personal Clinical Logbook and e-Portfolio throughout your six years, consolidating case clerkings, procedure logs, OSCE results and reflective notes. You will need this evidence for internship placement and MDCN registration.

Appendix I: Course Learning Outcome (CLO) to Programme Outcome (HPO) Mapping — Template and Worked Example

Every course specification in your course file (Section E) must include a CLO-HPO mapping matrix of this form. A worked example is provided below.

Worked Example — MED 401: Introduction to Clinical Medicine (Propaedeutics)

Course Learning Outcome

Mapped Programme Outcome(s)

CLO1: Take an accurate, structured medical history from a patient.

HPO1, HPO2, HPO3

CLO2: Perform a systematic physical examination across body systems.

HPO1, HPO2

CLO3: Formulate a differential diagnosis from history and examination findings.

HPO1, HPO6

CLO4: Communicate clinical findings clearly in written and oral case presentations.

HPO3, HPO10

Appendix II: Course Specification Template

Use this template as the first page of every course file (Section E):

Course Code and Title:

Credit Units / Status (Core or Elective):

Pre-requisite(s):

Level and Semester:

Course Aim(s):

Course Learning Outcomes (CLO1-CLOn):

CLO-to-HPO Mapping Matrix (see Appendix I):

Weekly Topics (15-week scheme):

Teaching Methods (lecture/tutorial/laboratory/clinical ratio):

Assessment Breakdown (continuous assessment % / examination %):

Recommended Textbooks and References:

Required Equipment/Facilities:

Appendix III: Recommended Textbooks and References

This master reading list supports the 'Recommended Textbooks and References' field of the Course Specification Template (Appendix II).

Appendix III.1 — MBBS Medicine and Surgery

Anatomy, Histology and Embryology

Moore, K.L., Dalley, A.F. and Agur, A.M.R. — Clinically Oriented Anatomy, Wolters Kluwer.

Gray, H. (eds. Standring, S.) — Gray's Anatomy: The Anatomical Basis of Clinical Practice, Elsevier.

Junqueira, L.C. and Mescher, A.L. — Junqueira's Basic Histology, McGraw-Hill.

Sadler, T.W. — Langman's Medical Embryology, Wolters Kluwer.

Physiology and Biochemistry

Guyton, A.C. and Hall, J.E. — Textbook of Medical Physiology, Elsevier.

Lauralee, S. — Human Physiology: From Cells to Systems, Cengage.

Lippincott — Illustrated Reviews: Biochemistry, Wolters Kluwer.

Pathology, Microbiology and Immunology

Kumar, V., Abbas, A.K. and Aster, J.C. — Robbins Basic Pathology, Elsevier.

Murray, P.R., Rosenthal, K.S. and Pfaller, M.A. — Medical Microbiology, Elsevier.

Abbas, A.K., Lichtman, A.H. and Pillai, S. — Cellular and Molecular Immunology, Elsevier.

Pharmacology

Katzung, B.G. — Basic and Clinical Pharmacology, McGraw-Hill.

Rang, H.P., Ritter, J.M., Flower, R.J. and Henderson, G. — Rang and Dale's Pharmacology, Elsevier.

Clinical Medicine and Surgery

Kumar, P. and Clark, M. — Kumar and Clark's Clinical Medicine, Elsevier.

Williams, N.S., Bulstrode, C.J.K. and O'Connell, P.R. — Bailey and Love's Short Practice of Surgery, CRC Press.

Hamilton, R. — Macleod's Clinical Examination, Elsevier.

Paediatrics, Obstetrics/Gynaecology and Psychiatry

Lissauer, T. and Carroll, W. — Illustrated Textbook of Paediatrics, Elsevier.

Hacker, N.F., Gambone, J.C. and Hobel, C.J. — Hacker and Moore's Essentials of Obstetrics and Gynecology, Elsevier.

Sadock, B.J., Sadock, V.A. and Ruiz, P. — Kaplan and Sadock's Synopsis of Psychiatry, Wolters Kluwer.

Community Health and Public Health Medicine

Park, K. — Park's Textbook of Preventive and Social Medicine, Banarsidas Bhanot.

World Health Organization — WHO guidelines and technical reports, as adopted by Faculty Board.

Professional Practice, Ethics and Regulation

Medical and Dental Council of Nigeria (MDCN) — Code of Medical Ethics in Nigeria, current edition.

World Federation for Medical Education (WFME) — Global Standards for Quality Improvement, current edition.