REPUBLIC OF KENYA
MINISTRY OF HEALTH

KENYA MEDICAL LABORATORY TECHNICIANS AND TECHNOLOGISTS BOARD

MEDICAL LABORATORY SCIENCES (MLS) STUDENT HANDBOOK

Pursuant to the Medical Laboratory Technicians and Technologists Act, CAP 253 A Laws of Kenya

KMLTTB QUALITY ASSURANCES SERVICES

	MEDICAL LABORATORY SCIENCES (MLS) STUDENT HANDBOOK		DOCUMENT CONTROL Serial: KMLTTB/MLS/STUDENTS HANDBOOK/01 Version 001 Date:17TH,NOVEMBER October, 2026
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INTRODUCTION

The Kenya Medical Laboratory Technicians and Technologists Board (KMLTTB) is a body corporate with statutory mandate to exercise general supervision and control over the training, practice, business and employment of medical laboratory technicians and technologists under Cap 253A Laws of Kenya. The Board also advises the Government in relations to all aspects thereof including validation of invitro diagnostics through Legal Notice NO.113 of 2011

Pursuant to the **Medical Laboratory Technicians and Technologists Act, CAP 253A of the Laws of Kenya**, the Kenya Medical Laboratory Technicians and Technologists Board (KMLTTB) establishes TRAINING STANDARDS which are a comprehensive regulatory framework. This standard governs medical laboratory operations for the diagnosis, treatment, clinical management, treatment monitoring, and prevention of all diseases, within the Republic of Kenya.

The main goal of the MLS services is to ensure provision of safe, professional, competent and ethical Medical Laboratory Services in accordance to Cap 253A of the Laws of Kenya.

The **Standards for Medical Laboratory curriculum mapping** is one of the guidelines prepared by the KMLTTB prescribing mandatory clinical practice and competencies professionals shall practice in the course of their duty.

Our Vision

"That the Health of every Kenyan will be fully protected through effective regulation of the practice of laboratory medicine."

Our Mission

"To Exercise General Control and Supervision over training, business, employment and practice of Laboratory Medicine and Advise the Government on all related matters."

Our Core Values

Integrity; Selfless service; Innovation and open-mindedness; Sense of belonging; Pride in what we do.

MEDICAL LABORATORY SCIENCES (MLS) STUDENT HANDBOOK

This handbook serves as a complete regulatory, academic, and professional guide for Medical Laboratory Sciences (MLS) students in Kenya, aligned with the Medical Laboratory Technicians and Technologists Act (MLTT act) (Cap. 253A Laws of Kenya). It outlines every milestone from admission and student indexing to clinical placements, Board licensing examinations, and entry into professional practice.

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REGULATORY FRAMEWORK AND INSTITUTIONAL COMPLIANCE

All MLS students must ensure their training institution and academic journey comply with national statutory mandates.

1. **Statutory Mandate.** The Kenya Medical Laboratory Technicians and Technologists Board (KMLTTB) is the statutory body established under Cap. 253A of the Laws of Kenya to regulate MLS training, curriculum standards, registration, and practice.

A. **Institutional Accreditation.** Students must verify that their university or college holds valid KMLTTB accreditation and annual approval before enrollment, alongside oversight from the Commission for University Education (CUE), KMTC Gazetement or TVETA.

B. **Digital Portal Access.** All regulatory applications, including indexing, examination booking, and license renewals are processed digitally through the KMLTTB eCitizen Portal or website: www.kmlttb.org

2. **Admission Criteria and Student Indexing**

Student indexing formally registers a trainee in the Board's database and is mandatory for sitting national licensing examinations.

Qualification Level	Minimum Mean Grade	Mandatory Subject Requirements (KCSE or KNEC/KNQA Equivalent)
Bachelor of Science (BSc) in MLS	C+ (Plus)	English/Kiswahili (C+), Mathematics/Physics (C+), Biology (C+), Chemistry (C+)
Diploma in MLS	C (Plain)	English/Kiswahili (C), Mathematics/Physics (C), Biology (C), Chemistry (C)

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A. **30-Day Rule.** Institutions must submit student indexing applications within **30 days** of admission. Students cannot present themselves individually for indexing.
B. **Required Documentation.** Students must provide certified copies of their KCSE certificate (or foreign equation certificate from KNEC/KNQA), National ID/Passport/Birth Certificate, two colored passport-size photos, admission letter, and requisite indexing fee receipts.
C. **Index Card Custody.** Upon approval, KMLTTB issues an Index Number and Card. Lost cards must be replaced immediately via the Board's portal.

3. CORE CURRICULUM AND ACADEMIC PROGRESSION

Under the KMLTTB Harmonized Curriculum Standards, programs follow a Competency-Based Education and Training (CBET) model

A. **Core Diagnostic Disciplines.** Training spans Bacteriology, Virology, Mycology, Parasitology, Medical Entomology, Haematology, Blood Transfusion Science, Clinical Chemistry, Histopathology/Cytopathology, Immunology, Molecular Diagnostics, Epidemiology, and Laboratory Management.
B. **Attendance Mandate.** Students must maintain a minimum class and practical attendance threshold (typically **90%** under KMLTTB training standards) to qualify for end-of-semester and Board assessments.
C. **Assessment and Pass Marks.** Progress is evaluated through continuous assessments, practical bench exams, and theory papers, with a standard minimum pass mark of **50%**.

4. CLINICAL ATTACHMENTS AND LOGBOOK MANAGEMENT

Clinical placement bridges classroom theory with real-world diagnostic workflow in KMLTTB-approved hospital laboratories.

A. **Duration and Hours.** Students must complete a minimum of **16 weeks** of supervised clinical attachment (scaling up to **1,760 hours** across block placements for long-cycle programs) rotating through all core laboratory departments.
B. **Clinical Logbook.** Trainees must maintain an official clinical logbook recording daily bench procedures, quality control checks, and case studies, countersigned weekly by a licensed KMLTTB-registered Medical laboratory supervisor.
C. **Vaccination and Health Clearance.** Before entering clinical rotations, students must complete mandatory immunizations, specifically **Hepatitis B** (full 3-dose series with anti-HBs titer verification) and Tetanus alongside other medical fitness certification.

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5. LABORATORY BIOSAFETY, BIOSECURITY AND ETHICS

MLS students are bound by the KMLTTB Code of Ethics and national biosafety regulations from day one of practical training.

Personal Protective Equipment (PPE). Full-length buttoned white lab coats, closed non-slip shoes, nitrile/latex gloves, and eye protection are mandatory in all technical zones. Lab coats must never be worn in cafeterias, libraries, or outside the laboratory.

A. **Biosafety and Containment.** Students must adhere to unidirectional workflow rules, handle infectious aerosols inside validated **Class II Biosafety Cabinets (BSCs)**, and know the locations of eyewash stations and safety showers (within 10 seconds travel distance).
B. **Waste Segregation.** Sharps go immediately into puncture-proof sharps boxes; infectious biological waste goes into yellow/red biohazard bags for autoclaving or incineration; general non-infectious waste goes into black bins.
C. **Patient Confidentiality.** All patient demographics, specimen records, and diagnostic results are strictly confidential. Unauthorized photography of samples, results, or patients is a severe disciplinary offense.

6. KMLTTB REGISTRATION EXAMINATIONS AND LICENSURE

Graduating from an academic institution does not automatically grant the right to practice; candidates must pass the national KMLTTB Registration Examinations.

A. **Eligibility.** Candidates must hold a valid KMLTTB Index Number, complete all academic coursework, fulfill clinical attachment hours, and obtain clearance from their training institution.
B. **Examination Format.** The Board examination assesses theoretical knowledge, practical bench competence, and oral/viva-voce problem-solving across all core MLS disciplines.
C. **Examination Integrity.** Under the KMLTTB Examination Irregularities SOP, impersonation, unauthorized materials, or collusion leads to immediate disqualification, cancellation of results, and potential blacklisting from future Board registration.
D. **Internship, Registration and Practice License.** Upon passing the Board exam, graduates complete mandatory internship/probation requirements, apply for full registration (as a **Medical Laboratory Technologists** for Diploma holders or **Medical Laboratory officers** for Degree holders), and acquire an annual practicing license renewed through Continuing Professional Development (CPD) point

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7. STUDENT LEADERSHIP, WELFARE AND SUPPORT

A. **Professional Associations.** Students are encouraged to join campus MLS student chapters and associate with the relevant other professional **Associations / societies in Kenya and beyond** for mentorship, scientific conferences, and career networking.

B. **Incident and Needle-Stick Protocol.** In the event of a needle-stick injury or biological splash, students must immediately wash the site with soap and water (or flush eyes), report to the bench supervisor, document the incident, and initiate Post-Exposure Prophylaxis (PEP) evaluation within **2 hours**.

.....THE END.....

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