

## **SERVICE AND MAINTENANCE OF MOLECULAR/MICROBIOLOGY LABORATORY EQUIPMENT**

**22<sup>nd</sup> -26<sup>th</sup> APRIL 2024**

### **Purpose**

The purpose of this course is to provide a practical approach where participants will be trained in the practical concepts of service and maintenance of molecular and microbiology laboratories equipment. The course will include practical aspects (80%) and theoretical aspects (20%).

### **Who should attend**

The course is aimed at laboratory technologists, people working in different industries who require knowledge on techniques for the maintenance and service of the various microbiology and or molecular laboratory equipment.

### **Course duration**

The course will run over a period of five days.

<b>DAY 1 (09.00-10.00)</b>	<ul style="list-style-type: none"> <li>● Registration and Orientation</li> <li>● Laboratory safety</li> </ul>
<b>10.00-10.30</b>	<b><i>Tea Break</i></b>
<b>11.00-12.30</b>	<ul style="list-style-type: none"> <li>● Overview of molecular and microbiology laboratory equipment such as the microscopes, PCR, weighing balances, vortexing equipment, hood, Autoclave, Centrifuge, refrigerators and freezers</li> </ul>
<b>12.30-14.00</b>	<ul style="list-style-type: none"> <li>● <b><i>Lunch Break</i></b></li> </ul>
<b>14.00 -16.30</b>	<ul style="list-style-type: none"> <li>● Basic operations of the various molecular/microbiology laboratory equipment</li> </ul>
<b>DAY 2 (9.00-10.30)</b>	<ul style="list-style-type: none"> <li>● General cleaning of the molecular/microbiology laboratory equipment</li> <li>● Chemicals/reagents/solvents used during cleaning of particular equipment</li> </ul>
<b>10.30-11.00</b>	<b><i>Tea Break</i></b>

<b>11.00-12.30</b>	<ul style="list-style-type: none"> <li>● Identification of common problems associated with the PCR, microscopes and weighing machines and other equipment commonly used in such laboratories</li> </ul>
<b>12.30-14.00</b>	<b><i>Lunch Break</i></b>
<b>14.00-16.30</b>	<ul style="list-style-type: none"> <li>● Developing service and maintenance programs</li> <li>● Laboratory equipment checklist</li> </ul>
<b>DAY 3 (9.00-10.30)</b>	<ul style="list-style-type: none"> <li>● Calibration, and verification of the various microbiology and molecular laboratories equipment</li> <li>● Discussions on calibration of laboratory equipment in relation data outcome and laboratory safety</li> </ul>
<b>10.30-11.00</b>	<b><i>Tea Break</i></b>
<b>11.00-12.30</b>	<ul style="list-style-type: none"> <li>● Interpretation and use of calibration certificates</li> <li>● Troubleshooting of the various microbiology/molecular laboratory equipment</li> </ul>
<b>12.30-14.00</b>	<b><i>Lunch Break</i></b>
<b>14.00-15.30</b>	<ul style="list-style-type: none"> <li>● Used laboratory equipment and quality replacement</li> </ul>
<b>DAY 4 (9.00-10.30)</b>	<ul style="list-style-type: none"> <li>● Various softwares used to process and visualize results using different equipment in the molecular laboratory</li> </ul>
<b>10.30-11.00</b>	<b><i>Tea Break</i></b>
<b>11.00-12.30</b>	<ul style="list-style-type: none"> <li>● <i>Continuation</i>; Softwares and the various applications</li> </ul>
<b>12.30-14.00</b>	<b><i>Lunch Break</i></b>
<b>14.00-15.30</b>	<ul style="list-style-type: none"> <li>● Various laboratory safety symbols and their interpretations</li> <li>● Interpretations of various colors associated with laboratory safety</li> </ul>
<b>DAY 5 (9.00-10.30)</b>	<ul style="list-style-type: none"> <li>● Maintenance and verification of equipment</li> </ul>
<b>10.30-11.00</b>	<b><i>Tea Break</i></b>
<b>11.00-12.30</b>	<ul style="list-style-type: none"> <li>● Recap on the course</li> </ul>
<b>12.30-14.00</b>	<b><i>Lunch Break</i></b>
<b>14.00 – 15.00</b>	<ul style="list-style-type: none"> <li>● Closing ceremony and issuance of certificates</li> </ul>
<b>Dates: 22<sup>nd</sup> – 26<sup>th</sup> April, 2024</b> <b>Deadline: 12<sup>th</sup> April, 2024</b>	
<b>Cost Kes.</b> <b>92,800.00 or</b> <b>USD 928.00</b>	
<b>NAIROBI</b>	