

**COURSE CODE:** MLS 212

**COURSE TITLE:** INTRODUCTION TO MEDICAL LABORATORY SCIENCE II

**NUMBER OF UNITS:** 2 UNITS

**COURSE DURATION:** TWO HOURS PER WEEK

**MODULE 1:** MICROSCOPY, MICROMETRY AND CARE OF MICROSCOPE

**COURSE LECTURER:** BANKOLE HENRY OLADEINDE

### **INTENDED LEARNING OUTCOMES**

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

1. Explain the principle of Microscopy
2. List different types of Microscopes and their uses
3. List the different parts of the Microscope and their functions
4. Measure the size of microscopic organisms
5. List steps for routine maintenance and care for the Microscope

### **COURSE DETAILS:**

**Week 1-3:** *General introduction to medical laboratory science (Clinical Chemistry, Haematology and Blood Transfusion Science, Medical Microbiology, Histopathology and Immunology)*

**Week 4-5:** *Specimen collection procedure; specimen collection bottles; reception and registration of specimen; storage and disposal of specimen*

**Week 6-7:** *Safety precautions in pathology laboratories against chemical, biological, electrical, materials and irradiation hazards.*

**Week 8-9:** *Techniques and principles of chemical sterilization and physical methods*

**Week 10-11:** *glassware cleaning, care and maintenance; breeding of laboratory animals*

**Week 12:** *Revision*

### **RESOURCES**

• **Lecturer's Office Hours:**

• Mr. Henry Bankole Oladeinde: Wednesdays: 1:00-2:00pm.

• **Course lecture Notes:**

• **Books:**

*Jawetz, Melnick and Adelbergs Medical Microbiology 26<sup>th</sup> Edition by Brooks JF, Morse SA, Carroll KC, Mietzner TA, Butel JS Mcgraw Hill 2013 ISBN: 978-0-07-181578-9*

*Sherris Medical Microbiology 4<sup>th</sup> Edition by Kenneth J.Ryan and George C. Ray Mcgraw Hill 2004. ISBN: 0-07-150238-6*



**MICROSCOPY, MICROMETRY AND CARE OF MICROSCOPE** by Bankole Henry Oladeinde is licensed under the Creative Commons Attribution- Non Commercial-Share Alike 4.0 International License **Project:**

- Homeworks + Project: ~ 30% of final grade.
- **Exams:**
- Final, comprehensive (according to university schedule): ~ 70% of final grade

### **Assignments & Grading**

- **Academic Honesty:** All class work should be done independently, unless explicitly stated otherwise on the assignment handout.
- You may discuss general solution strategies, but must write up the solutions yourself.
- If you discuss any problem with anyone else, you must write their name at the top of your assignment, labeling them “collaborators”.
- **NO LATE HOMEWORKS ACCEPTED**
- Turn in what you have at the time it’s due.
- All homeworks are due at the start of class.
- If you will be away, turn in the homework early.
- Late Assignments (projects) will not be accepted, but penalized according to the percentages given on the syllabus.



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