Molecular Biology Curriculum for Master students

*By Dr. Ahmed Sahib*

1. Lecture 1

-introduction

-DNA replication

2. Lecture 2

-Gene expression introduction

- mechanisms of gene expression

- gene expression control (operons)

3. Lecture 3

- Microbial genetics introduction

-transformation

-Conjugation

-Transduction

4.Lecture 4-5

- Molecular biology applications and tests (introduction)

- gel electrophoresis

- RFLP

- Hybridization techniques

- Gene cloning

5. Lecture 6

- PCR

-optimization of PCR

 By Dr. Maysaa Abdulrazak

1 Lecture

2 Genetic Mutations

3 Genetic variations

4 Cell Cycle

5 Genetic Check points

6 Introduction to Cytogenetic

7 Mitochondrial DNA