



# Paramedical Program

<b>Specialization</b>	<b>Medical Laboratories</b>
<b>Course Number</b>	<b>21107200</b>
<b>Course Title</b>	<b>Field training</b>
<b>Credit Hours</b>	<b>(3)</b>
<b>Theoretical Hours</b>	<b>(0)</b>
<b>Practical Hours</b>	<b>280 training hours</b>



### **Course Description**

This course introduces the students to practice conducting laboratory tests at various clinical sites ,to gain experience in applying quality control rules, use automated systems, correlation of laboratory results from all disciplines with clinical history.

### **Course Objectives**

Upon successful completion of this course, students will be able to

1. Understand and practice of Laboratory test using automated technology.
2. Understand principles of tests, clinical correlation, and results interpretation.
3. Expression of results in proper format, and use LIS .
4. Develop practical technical skills in handling instruments, reagents, and specimens.
5. Organization of work flow and quality control and quality assurance in clinical.
- 6- Perform specific tests accurately, precisely, and interpret and express results in proper unites and formats
- 7- Application of safe work flow in clinical laboratory and implementation of quality control programs

### **Course Content**

- 1-Laboratory organization and safety.
- 2- .Disposal of Laboratory wastes.
- 3- Specimen collection and inspection
- 4 Sample preparation.
- 5 Instrument calibration andstandardization
- 6 Automated analysis of chemistry tests
- 7 Automated hematology and coagulation.
- 8 Immunological and serological tests
- 9 Blood banking 8 Molecular diagnostic techniques (PCR)
- 10 Automation in microbiology.
- 11 Laboratory information systems
- 12 Quality control and quality assurance.

### **Useful Resources**

- Internet
- Instruments manuals
- Kits instructions

Teaching & Learning Methods

Experimentations, presentations, and group discussions

Reference Books

