



School of Medical Laboratory Sciences

Program:	Doctor of Medical Laboratory Sciences
Short Title:	DMLS
Duration:	10 Semesters (5 years)
Credit hours:	170
Eligibility:	FSc Pre Medical with minimum 50% marks or equivalent

Program Description:

This program will enable students to cope with the rapid advancement in the field of laboratory Technology. It will provide opportunity for clinical / medical lab technicians to excel in their field.

Objectives:

- Graduation will achieve accurate diagnosis skills which require highly specialized /sophisticated equipment.
- The graduates will perform effectively in state of the art diagnostic lab machines.
- Perform life saving role life saving in health care setting.

Career prospects:

After the completion of the degree, the graduates of doctors of medical laboratory sciences can work in:

- Clinical laboratories at Hospitals
- Medical colleges and Universities
- Reference labs
- Biotechnology labs
- Industry (food, Vaccine, Pharmaceutical)
- Research centers
- Forensic science labs

They can also serve as:

- Educators
- Administrators
- Laboratory specialists

Doctor of Medical Laboratory Sciences

Scheme of Studies

Semester I

Course Code	Course Title	Credit Hours
ENG-111	English-I (Functional English)	3(3-0)
IS-112	Islamic Studies	2(2-0)
IT-113	Introduction to Computing	3(2-1)
BPY-114	Physiology - I	3(2-1)
BIO-115	Biochemistry	3(2-1)
MLS-116	Medical Lab Technology	3(3-0)
Credit Hours :		17

Semester II

Course Code	Course Title	Credit Hours
ENG-121	Functional English - II	3(3-0)
MLS-122	Introduction to Lab Practice	3(2-1)
MLS-123	Physiology – II	3(2-1)
MLS-124	Clinical Chemistry	3(2-1)
PS-112	Pakistan Studies	2(2-0)
MLS-125	Computer Applications - II	3(2-1)
Credit Hours :		17

Semester III

Course Code	Course Title	Credit Hours
ENG-216	Technical writing & Presentation Skills	3(3-0)
MLS-211	Hematology - I	3(3-0)
MLS-212	Blood Banking - I	3(3-0)
MLS-213	Histopathology & Cytopathology - I	3(3-0)
MLS-214	Biostatistics	3(3-0)
MLS-215	Clinical Fluid Analysis	3(3-0)
Credit Hours :		18

Semester IV

Course Code	Course Title	Credit Hours
MLS-221	General Pathology	3(3-0)
MLS-222	Hematology - II	3(3-0)
MLS-223	Blood Banking - II	3(3-0)
MLS-224	Histopathology & Cytopathology - II	3(3-0)
MLS-225	Medical Statistics and Research	3(3-0)
MLS-226	Diagnostic Molecular Biology	3(3-0)
Credit Hours :		18

Semester V

Course Code	Course Title	Credit Hours
MLS-311	Advance Immunoltematology	3(3-0)
MLS-312	Blood Banking – III	3(3-0)
MLS-313	Histopathology & Cytopathology - III	3(3-0)
MLS-314	Behavior Science	3(3-0)
MLS-315	Community Medicine	3(3-0)
MLS-316	General Micro biology	3(3-0)
Credit Hours :		18

Semester VI

Course Code	Course Title	Credit Hours
MSL-321	Chemical Pathology - I	3(3-0)
MSL-322	Clinical Microbiology	3(3-0)
MSL-323	Immunology & Serology - I	3(3-0)
MSL-324	Genetics - I	3(3-0)
MSL-325	Biomedical Instrumentation - I	3(3-0)
MSL-326	Advance Clinical Chemistry	3(3-0)
Credit Hours :		18

Semester VII

Course Code	Course Title	Credit Hours
MSL-411	Advance Lab Concepts	4(4-0)
MSL-412	Laboratory Operations	3(3-0)
MSL-413	Advance Clinical Correlations – I	3(3-0)
MSL-414	Professional Ethics	2(2-0)
MSL-415	Legal Aspects in Clinical Practice	3(3-0)
Credit Hours :		15

Semester VIII

Course Code	Course Title	Credit Hours
MSL-421	Chemical Pathology – II	3(3-0)
MSL-422	Advance Clinical Microbiology	3(3-0)
MSL-423	Immunology & Serology – II	3(3-0)
MSL-424	Economics	3(3-0)
MSL-425	Pharmacology	3(3-0)
MSL-426	Bio-Medical Instrumentation - I	3(3-0)
Credit Hours :		18

Semester IX

Course Code	Course Title	Credit Hours
MSL-511	Clinical Lab Practice - III	3(3-0)
MSL-512	Medical Statistics & Research - I	3(3-0)
MSL-513	Advance Clinical Correlation - II	3(3-0)
MSL-514	Evidence Based Practice	3(3-0)
MSL-515	Project - I	3(0-6)
Credit Hours :		15

Semester X

Course Code	Course Title	Credit Hours
MSL-521	Quality Control in Medical Laboratory Practice	3(3-0)
MSL-522	Advance Clinical Correlation - II	4(3-1)
MSL-523	Research Practice	3(3-0)
MSL-524	Project – II	3(0-6)
	Elective-I	3(3-0)
Credit Hours :		16
Total Credit Hours :		170

