

كلية العلوم الطبية التطبيقية

قسم علوم المختبرات الطبية

ماجستير العلوم في المختبرات الاكلينيكية

College of Applied Medical Sciences

Medical Laboratory Sciences

Master of Science (MSc) in Clinical Laboratory Sciences

CLS MSc Program Paths

1

Biochemistry & Molecular Medicine

2

Microbiology & Immunology

3

Hematology & Blood Transfusion

Track 1: BIOCHEMISTRY & MOLECULAR MEDICINE

Course code	Course Title	Credit hours		
		Lecture	Practical /Tutorial /Labs	Total
First Semester				
CLS 601	Cellular & Molecular Biology	3	2	5
CLS 602	Professional Practice in Medical Laboratory.	2	1	3
CLS 603	Biostatistics.	2	2	4
	Total Credits			12
Second Semester				
CLS 611	Biochemistry I	3	2	5
CLS 604	Research Methodology.	4	0	4
	Total Credits			9
Third Semester				
CLS 614	Biochemistry II	3	2	5
CLS613	Molecular Bases of Diseases	3	1	4
CLS605	Medical Genetics	3	0	3
	Total Credits			12
Fourth Semester				
CLS612	Biochemistry of Body Fluids	3	2	5
CLS 616 OR CLS 617	Endocrinology and medical metabolism OR Topics in molecular medicine	2	2	4
	Total Credits			9
Fifth Semester				
CLS615	Molecular Diagnostics	3	2	5
CLS 606	Project proposal	0	3	3
	Total Credits			8
Sixth Semester				
CLS 607	Thesis	0	9	9
	Master Program Total Credits			59

Track 2: MICROBIOLOGY & IMMUNOLOGY

Course code	Course Title	Credit hours		
		Lecture	Practical /Tutorial /Labs	Total
First Semester				
CLS 601	Cellular & Molecular Biology	3	2	5
CLS 602	Professional Practice in Medical Laboratory.	2	1	3
CLS 603	Biostatistics.	2	2	4
	Total Credits			12
Second Semester				
CLS 621	Microbiology I	3	2	5
CLS 604	Research Methodology.	5	0	4
	Total Credits			9
Third Semester				
CLS 624	Microbiology II	3	2	5
CLS 623	Diagnostic Microbiology	2	2	4
CLS605	Medical Genetics	3	0	3
	Total Credits			12
Fourth Semester				
CLS 622	Immunology	3	2	5
CLS 626 OR CLS 627	Viral Pathogenesis and infection OR Infectious and non-infectious diseases	2	2	4
	Total Credits			9
Fifth Semester				
CLS 625	Antimicrobial agents and infection control	3	2	5
CLS 606	Project proposal	0	3	3
	Total Credits			8
Sixth Semester				
CLS 607	Thesis	0	9	9
	Master Program Total Credits			59

Track 3: HEMATOLOGY & BLOOD TRANSFUSION

Course code	Course Title	Credit hours		
		Lecture	Practical /Tutorial /Labs	Total
First Semester				
CLS 601	Cellular & Molecular Biology	3	2	5
CLS 602	Professional Practice in Medical Laboratory	2	1	3
CLS 603	Biostatistics.	2	2	4
	Total Credits			12
Second Semester				
CLS 631	Hematology I	3	2	5
CLS 604	Research Methodology	4	0	4
	Total Credits			9
Third Semester				
CLS 634	Hematology II	3	2	5
CLS 632	Blood Transfusion I	2	2	4
CLS605	Medical Genetics	3	0	3
	Total Credits			12
Fourth Semester				
CLS 633	Diagnostic Molecular Hematology	2	2	4
CLS 636	Blood coagulation and homeostasis	2	2	4
OR	OR			
CLS 637	Blood Transfusion II			
	Total Credits			9
Fifth Semester				
CLS 635	Topics in Clinical Hematology	3	2	5
CLS 606	Project proposal	0	3	3
	Total Credits			8
Sixth Semester				
CLS 607	Thesis	0	9	9
	Master Program Total Credits			59

Best of Luck