FIRST YEAR (Freshman Year)

First Semester (Level 1)

COURSE		TITLE	LT	LB	CR
MED	112	Medical Terminology	2	0	2
CLS	113	Introduction to Clinical Laboratory Science	2	0	2
STAT	114	Biostatistics	3	0	3
BIOL	115	Biology in Health Sciences	2	3	3
CHEM	116	Chemistry in Health Sciences	2	3	3
ENGL	101	An Introduction to Academic Discourse	3	0	3
SLM	183	Belief and its consequences	2	0	2
Total			16	6	18

Second Semester (Level 2)

COURSE		TITLE	LT		LB	CR
MED	122	Anatomy and Physiology I	2	3		3
CLS	123	Hematology I	2	3		3
CHEM	124	Biochemistry	3	3		4
BIOL	125	Microbiology	2	3		3
ENGL	102	Introduction to Report Writing	3	0		3
ARB	101	Practical Grammar	2	0		2
Total			14	12		18

Second YEAR (Sophomore Year)

First Semester (Level 3)

COURSE		TITLE	LT	LB	CR
CLS	211	Medical Genetics	2	3	3
MED	212	Anatomy and Physiology II	2	3	3
CLS	213	Clinical Microbiology I	3	3	4
CLS	214	Hematology II	2	3	3
CLS	215	Instrumentation	1	3	2
MATH	217	Laboratory Mathematics	2	0	2
SLM	284	Professional Ethics	2	0	2
Total			14	15	19

Second Semester (Level 4)

COURSE		TITLE	LT	LB	CR
CLS	221	Clinical Chemistry I	3	3	4
CLS	222	Immunology	3	3	4
CLS	223	Urine Analysis & Body Fluids	1	3	2
CLS	224	Diagnostic Molecular Biology	3	3	4
CLS	225	Laboratory Operations	3	0	3
ARB	201	Writing for Professional Needs	2	-	2
Total			15	12	19

Third YEAR (Junior Year)

First Semester (Level 5)

COURSE		TITLE	LT	LB	CR
CLS	311	Clinical Chemistry II	3	3	4
MED	312	Pathology	3	0	3
CLS	313	Immunohematology	3	3	4
CLS	314	Clinical Mycology and Parasitology	2	3	3
ARB	302	Oral Communication Skills	2	0	2
Total			13	9	16

Second Semester (Level 6)

COURSE		TITLE	LT	LB	CR
CLS	321	Clinical Hematology	3	6	5
CLS	322	Clinical Immunohematology	3	6	5
CLS	323	Research Methods	2	0	2
CLS	3XX	CLS Elective I	3	0	3
SLM	388	Human Rights in Islam	2	0	2
Total			13	12	17

FOURTH YEAR (Senior Year)

Third Semester (Level 7)

COURSE		TITLE	LT	LB	CR
CLS	411	Clinical immunology	3	6	5
CLS	412	Advanced Clinical Chemistry	3	6	5
CLS	413	Clinical Microbiology II	3	6	5
CLS	414	Graduation Project	0	3	1
CLS	4XX	CLS Elective II	3	0	3
Total			12	21	19

Third Semester (Level 8)

COURSE		TITLE	LT	LB	CR

TOTAL CREDITS: (126)

COURSE DESCRIPTION

FIRST YEAR – 1st SEMESTER - 1st LEVEL

MED 112 **Medical Terminologies** **(2-0-2)**

This course introduces prefixes, suffixes, and word roots used in the language of medical science. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell and define medical terms as related to selected body systems and their pathological disorders.

Pre-requisite: None

CLS 113 **Introduction to Clinical Laboratory Science** **(2-0-2)**

This course covers the essential theories, concepts, and practices that define the scope of practice in clinical laboratory science as a distinctive profession within the field of healthcare system. Instructional areas comprise the pre-analytical, analytical, and post-analytical components of contemporary medical lab services.

Prerequisite: None

STAT 114 **Biostatistics** **(3-0-3)**

This course introduces students to methods and concepts of statistical analysis and sampling, with special focus to those occurring in biological sciences. Topics include descriptive measures, probability and distributions, estimation, tests of hypotheses, types of error, significance, confidence levels, sample size and power.

Prerequisite: One-year preparatory mathematics

BIOL 115 **Biology in Health Sciences** **(2-3-3)**

This course is designed to introduce the students to scientific process and production of biological knowledge with special emphasis on important concepts and principles common to health sciences. Topics include prokaryotic & eukaryotic cells, cellular respiration, transportation, tissue types, body systems, Apoptosis and mutations. Lab experiences Includes microscopy, preparation of slides and both gross & microscopic examination of cells and their contents.

Pre-requisite: None

CHEM 116 **Chemistry in Health Sciences** **(2-3-3)**

This course provides students a deep understanding in chemistry of biological compounds where relevant topics will be applied to illustrate the centrality of chemistry in life sciences with emphasis on link between chemistry and health. Topics include gases, concentration of solutions and dilution and their link to health, energy, nuclear chemistry, acids, bases and equilibrium, amino acids, proteins, enzymes and lipids.