INTEGRAL UNIVERSITY, LUCKNOW

INTEGRAL INSTITUTE OF ALLIED HEALTH SCIENCES & RESEARCH

DEPARTMENT OF PARAMEDICAL SCIENCES

BACHELOR OF MEDICAL LABORATORY SCIENCE
(BMLS)
SYLLABUS AND EVALUATION SCHEME
YEAR/ SEMESTER
I/I & I/II
&
PEOs-POs-PSOs

Integral University, Lucknow
Department of Paramedical Sciences
Study and Evaluation Scheme

Program: BMLS **Semester-I**

S. N.	Course code	Course Title	Type of Paper	Period Per hr/week/sem			Evaluation Scheme				Sub. Total	Credit	Total Credits
				L	T	P	CT	TA	Total	ESE			
THEORIES													
1	LS101	Human Anatomy- I	Core	3	1	0	40	20	60	40	100	3:1:0	4
2	LS102	Human Physiology-I	Core	3	1	0	40	20	60	40	100	3:1:0	4
3	LS103	Basic of Biochemistry	Core	3	1	0	40	20	60	40	100	3:1:0	4
4	LS104	Basic Preventive Medicine & Community Health Care	Core	3	1	0	40	20	60	40	100	3:1:0	4
5	LN101	Basic Professional Communication	Core	2	1	0	40	20	60	40	100	2:1:0	3
6	CS103	Introduction to Computers	Core	2	1	0	40	20	60	40	100	2:1:0	3
PRACTICAL													
1	LS105	Human Anatomy- I Lab	Core	0	0	2	40	20	60	40	100	0:0:1	1
2	LS106	Human Physiology-I Lab	Core	0	0	2	40	20	60	40	100	0:0:1	1
3	LS107	Basic of Biochemistry-I Lab	Core	0	0	2	40	20	60	40	100	0:0:1	1
Total				**16**	**06**	**06**	**360**	**180**	**540**	**360**	**900**	**25**	**25**

S. N.	Course code	Course Title	Type of Paper	Attributes							United Nation Sustainable Development Goal (SDGs)
				Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
THEORIES											
1	LS101	Human Anatomy- I	Core	√	√	√			√	√	3,4
2	LS102	Human Physiology-I	Core	√	√	√	√		√	√	3,4
3	LS103	Basic of Biochemistry	Core	√	√	√	√		√	√	3,4
4	LS104	Basic Preventive Medicine & Community Health Care	Core	√	√	√	√		√	√	3,4
5	LN101	Basic Professional Communication	Core			√					3,4,11
6	CS103	Introduction to Computers	Core	√	√	√	√		√	√	3,4
PRACTICAL											
1	LS105	Human Anatomy- I Lab	Core	√	√	√	√		√	√	3,4
2	LS106	Human Physiology-I Lab	Core	√	√	√	√		√	√	3,4
3	LS107	Basic of Biochemistry-I Lab	Core	√	√	√	√		√	√	3,4

L: Lecture **T:** Tutorials **P:** Practical **CT:** Class Test **TA:** Teacher Assessment **ESE:** End Semester Examination,
AE= Ability Enhancement, DSE- Discipline Specific Elective, **Sessional Total:** Class Test + Teacher Assessment **Subject Total:** Sessional Total + End Semester Examination (ESE)

Integral University, Lucknow
Department of Paramedical Sciences
Study and Evaluation Scheme

Program: BMLS **Semester-II**

S. N.	Course code	Course Title	Type of Paper	Period Per hr/week/sem			Evaluation Scheme				Sub. Total	Credit	Total Credits
				L	T	P	CT	TA	Total	ESE			
THEORIES													
1	LS108	Human Anatomy-II	Core	2	1	0	40	20	60	40	100	2:1:0	3
2	LS109	Human Physiology-II	Core	2	1	0	40	20	60	40	100	2:1:0	3
3	LS110	Medical Biochemistry-I	Core	3	1	0	40	20	60	40	100	3:1:0	4
4	LS111	Introduction to Pathology, Hematology & Clinical Pathology	Core	3	1	0	40	20	60	40	100	3:1:0	4
5	LS112	Medical Law & Ethics	Core	3	1	0	40	20	60	40	100	3:1:0	4
6	LN131	Effective Communication and Media Studies in English	Core	2	1	0	40	20	60	40	100	2:1:0	3
PRACTICAL													
1	LS113	Human Anatomy-II - Lab	Core	0	0	2	40	20	60	40	100	0:0:1	1
2	LS114	Human Physiology-II - Lab	Core	0	0	2	40	20	60	40	100	0:0:1	1
3	LS115	Medical Biochemistry-I – Lab	Core	0	0	2	40	20	60	40	100	0:0:1	1
4	LS116	Introduction to Pathology, Hematology & Clinical Pathology- Lab	Core	0	0	2	40	20	60	40	100	0:0:1	1
Total				**15**	**06**	**08**	**400**	**200**	**600**	**400**	**1000**	**25**	**25**

S. N.	Course code	Course Title	Type of Paper	Attributes							United Nation Sustainable Development Goal (SDGs)
				Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
THEORIES											
1	LS108	Human Anatomy-II	Core	√	√	√	√		√	√	3,4
2	LS109	Human Physiology-II	Core	√	√	√	√		√	√	3,4
3	LS110	Medical Biochemistry-I	Core	√	√	√	√		√	√	3,4
4	LS111	Introduction to Pathology, Hematology & Clinical Pathology	Core	√	√	√	√		√	√	3,4
5	LS112	Medical Law & Ethics	Core					√			3,4
6	LN131	Effective Communication and Media Studies in English	Core			√					3,4, 11
PRACTICAL											
1	LS113	Human Anatomy-II - Lab	Core	√	√	√	√		√	√	3,4
2	LS114	Human Physiology-II - Lab	Core	√	√	√	√		√	√	3,4
3	LS115	Medical Biochemistry-I – Lab	Core	√	√	√	√		√	√	3,4
4	LS116	Introduction to Pathology, Hematology & Clinical Pathology- Lab	Core	√	√	√	√		√	√	3,4

L: Lecture **T:** Tutorials **P:** Practical **CT:** Class Test **TA:** Teacher Assessment **ESE:** End Semester Examination,
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BACHELOR OF MEDICAL LABORATORY SCIENCE (BMLS)

Program Educational Outcomes (PEOs)

Program Educational Outcomes (PEOs)

The PEOs are broad statements that describe the career and professional accomplishments that the program is preparing its graduates to achieve in few years subsequent to receiving the degree. The PEO's of the BMLS program are as follows and the graduates of the Integral University forensic science program will be expected to:

PEO1:	Upgrade knowledge and skills in a changing healthcare scenario. Communicate with other members of healthcare team, customers and patients in an effective manner.
PEO2:	Should be able to extrapolate data acquired. Perform routine clinical laboratory testing.
PEO3:	Make specimen-oriented decisions on predetermined criteria including working knowledge of critical values. Process information and ensure quality control as appropriate to routine laboratory procedures.
PEO4:	Train students in routine laboratory procedure. Should know the logical interpretation of clinical lab investigations.
PEO5:	Should be able to working on automated machine. Every individual to address problem solving and judgement in efficient manner.

BACHELOR OF MEDICAL LABORATORY SCIENCE (BMLS)

PROGRAMME OUTCOMES (POs)

BACHELOR OF MEDICAL LABORATORY SCIENCE (BMLS)
PROGRAMME OUTCOMES (POs)

PROGRAMME OUTCOMES (POs) POs and its Attributes: -

- Program Outcomes (POs) are attributes of the graduates of the Programme that are the medical laboratory science Programme is to prepare students to deals with all the clinical laboratory investigations on clinical samples for laboratory diagnosis of various diseases. Blood, tissue and body fluids are analyzed and examined for various types of foreign organisms and abnormalities. This information is then used by the medical team to make decisions regarding a patient's medical care. 85% of all medical decisions are based on the results of clinical laboratory investigation reports. The graduates of medical laboratory Sciences Programme of the Integral University will be expected to:

PO-1:	Collection and receiving of specimens (infectious samples i.e. blood, urine, stool, sputum, pus, semen, tissues and body fluids) for various biochemical, pathological, microbiological, haematological and blood bank investigations, etc.
PO-2:	To perform and validate various investigations for the purpose of differential diagnosis.
PO-3:	Calibration and standardization of glassware 's and other laboratory equipment.
PO-4:	Standardization and selection of test analytical procedures.
PO-5:	Maintenance of supplies of laboratory reagents / diagnostic kits.
PO-6:	Evaluation of reagents and diagnostic kit for diagnostic suitability.
PO-7:	Maintenance of quality control for reliability of laboratory reports.
PO-8:	Preparation of chemical and biological reagents.
PO-9:	Supervision, organization of work and personnel management.
PO-10:	Maintenance of records and preparation.
PO-11:	Then they analyze the results and relay them to physicians.
PO-12:	With increasing automation and the use of computer technology, the work of Technologists has become less hands-on and more analytical.

BACHELOR OF MEDICAL LABORATORY SCIENCE (BMLS)

Program Specific Outcomes (PSOs)

BACHELOR OF MEDICAL LABORATORY SCIENCE
(BMLS)
PROGRAMME SPECIFIC OUTCOME (PSOs)

Program Specific Objectives (PSOs) are specific statements that describe the professional career accomplishment that the program is designed. The PSO's of the BMLS program are as follows:

PSO1:	Students will be able to know about the Clinical samples collection handling, preservation & processing.
PSO2:	The student able to perform and validate various investigations for the purpose of differential diagnosis.
PSO3:	Maintenance of quality control for reliability of laboratory reports
PSO4:	Supervision, organization of work and personnel management.
PSO5:	With increasing automation and the use of computer technology, the work of Technologists has become less hands-on and more analytical.