Course Number and Title	ML 100 Introduction to Clinical Laboratory Operations

Credit Hours	2 Credit Hours

Course Description	This course will introduce new Medical Laboratory Technology students to the terms, concepts, procedures, and equipment used in a professional clinical laboratory. Topics covered will include communication, professional ethics and regulatory agencies; basic laboratory safety, equipment, and techniques; phlebotomy/specimen processing; quality control concepts; process improvement, documentation, and computer usage; and point of care testing.

Prerequisite(s) and/or Corequisite(s)	Prerequisite: Admission to the Medical Laboratory Technology program. Co-requisite: ML 101 and ML 104.

Required Textbooks/References/Course Materials:

Basic Clinical Laboratory Techniques	6th	Estridge	Reynolds, Delmar Publishing	1111138362

	General Education Outcomes
1	Utilize written and verbal language to discuss and comprehend information, incorporating a variety of technologies, such as text, data, and images (written language, verbal language, and information technology).
2	Identify and interpret relevant information in order to formulate an opinion or conclusion (critical thinking).
3	Demonstrate and communicate computational methods and mathematical reasoning in a variety of formats (using words, tables, graphs, mathematical equations, etc., as appropriate) (quantitative literacy and fluency).
4	Communicate in appropriate ways with those who are culturally diverse (intercultural competence).

	Program/Department Outcomes
1	Graduates will demonstrate skills, knowledge and proper attitudes to realize a career as entry level Medical Laboratory Technicians in hospitals and other health care environments.
2	Graduates must demonstrate professionalism and conduct that reflects safe, legal, and ethical behavior.
3	Graduates will have the necessary knowledge to be able to pass a national certification examination.
4	Graduates must be able to communicate in a facilitative, purposeful and respectful manner with patients, families, colleagues, and other members of the health care team.
5	Graduates will have knowledge of prospective job information in an effort to achieve 100% placement within 3 months of graduation or for continuing their undergraduate education in medical technology or other field of their choice.
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	Course Outcomes (CO)	Bloom's Domain for CO (C, A, P), Category, and Level	Program/ Department Outcome(s)	Written Language	Verbal Language	Information Technology	Critical Thinking	Quantitative Literacy and Fluency	Intercultural Competence
1	Describe the organization and function of the clinical laboratory.	C-Remembering (1)	1	0	0	0	1	0	0
2	Practice laboratory safety rules to guard against chemical, physical, and biological hazards.	A-Responding to Phenomena (2)	1,2,3	0	0	0	1	0	0
3	Identify parts and demonstrate use of a microscope, labware and general laboratory equipment.	P-Manipulating (2)	1	0	0	0	1	0	0
4	Perform capillary and venipuncture procedures and proper specimen handling.	P-Perfecting (3)	1,3,4	0	1	0	1	0	0
5	Demonstrate professional, ethical behavior.	A-Valuing (3)	1,2	0		0	1	0	0
6	Use proper medical terminology when referring to laboratory techniques and procedures.	C- Remembering (1)	1,3,4	0	1	0	1	0	0
7	Describe the use of computer information systems in relation to pre-analytical, analytical, and post-analytical phases of patient care.	C Remembering (1)	1,3	0	0	1	1	0	0
8	Identify quality control measures used to ensure high quality laboratory results.	C-Remembering (1)	1,3	0	0	0	1	1	0

Bloom's Domain Legend
C = Cognitive
A = Affective
P = Psychomotor

General Education Outcome Legend
2 = Included and Measurable
1 = Introduced and/or Minimally Addressed and Not Measurable
0 = Not included

Approved: May 2021
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