**Essential Functions**
**Medical Laboratory Scientist/Medical Technologist**

The Medical Laboratory Scientist certification is recognized as a broad area of study requiring the acquisition of general knowledge and basic and advanced skills in a variety of fields of laboratory medicine. The education of a medical laboratory scientist requires assimilation of knowledge, acquisition of skills, demonstration of a professional orientation that supports clinical success, and development of judgment through experience in preparation for independent and appropriate decisions required in practice.

CCMLS endeavors to select and educate students who can become highly competent medical laboratory scientists. As an accredited program, MSU Denver-CCMLS adheres to the guidelines promulgated by the National Accrediting Agency for Clinical Laboratory Science (NAACLS). Within these guidelines, CCMLS has the freedom and ultimate responsibility for the selection of students; the design, implementation and evaluation of its curriculum; evaluation of students; and the determination of who should be awarded a certificate of completion. Admission and retention decisions are based upon satisfactory academic progress and professionalism factors that serve to ensure that the student can complete the MLS curriculum, based on the essential requirements and functions of the program, that are required for graduation.

CCMLS has the responsibility to assure the public that its graduates are fully competent medical laboratory scientists, capable of fulfilling their professional duties. Thus, it is important that persons admitted possess the intelligence, integrity, compassion, humanitarian concern, professional orientation, and physical and emotional capacity necessary to practice in the profession.

CCMLS is committed to the principle of equal opportunity. MSU Denver–CCMLS does not discriminate based on race, color, creed, religion, national origin, gender, sexual orientation, age, marital status, disability or veteran status. When requested, CCMLS will provide reasonable accommodations to otherwise qualified students with disabilities.

**Acquisition of Professional Knowing and Application of Knowledge**

The CCMLS curriculum requires essential abilities in acquisition of and application of knowledge. The student must:

- have the cognitive abilities necessary to master relevant content in didactic and clinical courses at a level deemed appropriate by the faculty. These skills may include, but are not limited to, comprehension, memorization, analysis, and synthesis.
- be able to master knowing presented in coursework in a variety of forms, including but not limited to, lectures, written material, projected images, small & large group discussions, technical simulations, laboratory sessions and clinical experience.
- be able to analyze client results and use instrumentation accurately and safely.
- be able to use knowledge of techniques/resources to respond quickly and/or sufficiently to effectively handle a variety of clinical situations in an efficient timeframe.
- be able to develop reasoning and decision-making skills appropriate to the practice of medical laboratory science.
- be able to recognize problematic situations and take appropriate action such as recognizing emergency situations.
- be responsive to corrective feedback and demonstrate the ability to progress with experience.

**Achievement of Technical Standards**

Technical standards, as distinguished from academic standards*, refer to those physical, cognitive and behavioral abilities required for satisfactory completion of all aspects of the curriculum, and the development of professional attributes required by the faculty of all students at graduation. The achievement of technical standards is pre-requisite for practice in the profession. The essential abilities required by the curriculum are in the following areas: motor, sensory, communication, intellectual, and behavioral/professional.

***Motor and Sensory Abilities***

The student must:

- have vision sufficient to obtain accurate readings & results and complete client forms accurately, including, but not limited to reading charts, graphs, instrument scales, monitors/computer screens, oscilloscope digital readings and printouts; using microscopes & making microscopic distinctions regarding formed elements and cells; discernment of color; depth perception.
- be able to observe clients for abnormal reactions during specimen collection, clinical specimens for abnormalities, as well as teaching demonstration in order to appropriately apply demonstrated techniques to their own laboratory assignments.
- observe and respond to emergency lights.
- have hearing sufficient to respond to emergency and instrumentation signals and sounds; to respond to phones; tocommunicate effectively over the phone; to respond to colleagues and other medical personnel in routine and emergency settings.
- possess motor and sensory skills and coordination sufficient to handle and adjust instruments with safety and accuracy; to obtain specimens; to manipulate tools, instruments and equipment; to prepare reagent fluids; to perform routine analytical techniques; to multi-task; and to perform emergency techniques under stressful conditions.
- be able to organize and adjust to workflow variations while maintaining accuracy and efficiency and meeting turn around times.
- be able to perform and/or problem solve a variety of “direct patient care” procedures, including but not limited to, phlebotomy, capillary puncture, bleeding times; microbiology specimen collection; and to interact appropriately with the patient.

***Communication Abilities***

The student must:

- be able to effectively speak directly with patients, physicians, faculty, co-workers and other members of the health care team; be able to assess all information including non-verbal responses, and to respond in an appropriate and empathetic manner.
- be able to effectively speak directly with faculty and other students in a variety of environments/situations including, but not limited to, lectures, small & large group discussions, technical simulations, laboratory sessions, in writing, and during clinical activities.
- be able to instruct others in training situations.
- have speech and hearing skills sufficient to be understood by others and to understand others in classroom, laboratory and clinical settings, as well as during “direct patient care” procedures.
- possess interactive skills and sensitivity sufficient to maintain a cooperative and productive climate of work relationships.
- be able to process and communicate laboratory and clinical information in an accurate and timely manner via computer, written documents & protocols, by phone and through direct verbal interaction. Computer data, written, and verbal information must be complete, detailed as required, and accurate.

- be able to hear, follow directions, orally communicate protocols to others and retain previously learned protocols for future application. Appropriate communication also relies on the student's ability to make a correct judgment in seeking supervision and assistance in a timely manner.

***Behavioral/Professional Abilities***

The student must:

- be able to understand the basis and content of medical ethics.
- possess attributes, which include integrity, responsibility and tolerance.
- have the emotional stability to function effectively under stress and to adapt to an environment, which may change rapidly, and/or in unpredictable ways.
- be able to strictly adhere to testing protocols and other policies, including but not limited to, safety and confidentiality within the time frame set by course faculty.
- display professional attributes consistent with an awareness of the medical laboratory scientist's role and their effect on patient care including but not limited to the need for accuracy in analytical work and reporting; punctuality; professional demeanor and presentation; cooperation with peers, other healthcare practitioners, and the patient.
- be able to work in teams as well as independently

Note: * Academic standards of achievement are defined in each course syllabus and consist of both a minimum percentile (grade) achievement required to pass the didactic portion of the course curriculum, minimum competency achievement levels in the laboratory portion of the curriculum, and professionalism requirements.

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