Students enrolling in and graduating from a Medical Laboratory Science program must meet the essential function requirements of the academic program and the profession. Essential Functions are the non-academic standards that a student must be able to master to participate successfully in the MLS program and become employable. Examples of this program's essential functions are provided below. If you are not sure that you will be able to meet these essential functions, please consult with the Department head or Program Director for further information.

**Essential Visual and Observation Skills for Medical Laboratory Science**

The Medical Laboratory Science student must be able to:

- Observe laboratory demonstrations in which biological (body fluids, culture materials, tissue sections and cellular) specimens are tested for their biochemical, hematological, immunological, microbiological and histochemical components.
- Characterize the color, odor, clarity and viscosity of biological samples, reagents, or chemical reaction products.
- Utilize a clinical grade binocular microscope to discriminate among the fine structural and color (hue, shading and intensity) differences of microscopic specimens.
- Read and comprehend text, numbers and graphs displayed in print and on video monitor.
- Recognize alarms

**Essential Motor and Mobility Requirements for Medical Laboratory Science**

- The Medical Laboratory Science student must be able to:
- Perform laboratory testing adhering to existing laboratory safety standards.
- Perform moderately taxing continuous physical work, often requiring prolonged sitting and/or standing over several hours.
- Travel to assigned clinical laboratory practicum sites.
- Reach laboratory bench tops and shelves, patients lying in hospital beds or patients seated in specimen collection furniture.
- Grasp, hold, transport, and utilize specimens, reagents, hazardous chemicals and equipment in a safe manner as needed to perform laboratory testing.
- Obtain patient specimens in a timely, safe and professional manner (e.g. perform phlebotomy).
- Use laboratory equipment (e.g. pipettes, inoculating loops, test tubes) and instruments to perform laboratory procedures according to established laboratory guidelines.
- Use computer keyboard to operate laboratory instruments and to calculate, record, evaluate and transmit laboratory information.
- Troubleshoot and correct basic equipment malfunctions.

**Essential Communication Requirements for Medical Laboratory Science**

The Medical Laboratory Science student must be able to:

- Read and understand technical and professional material (textbooks, journal articles, handbooks and instruction manuals).
- Follow oral and written instructions independently.
- Clearly instruct patients regarding specimen collection.
- Demonstrate sensitivity, confidentiality and respect when speaking with patients.
- Communicate clearly, accurately and tactfully with faculty members, student colleagues, staff and other healthcare professionals orally and in a recorded format (writing, typing, graphics, or telecommunications).

**Essential Intellectual Requirements for Medical Laboratory Science**

The Medical Laboratory Science student must be able to:

- Comprehend, measure, calculate, reason, integrate, analyze, evaluate, correlate, problem-solve and compare.
- Recognize abnormal laboratory results (e.g., patient and Quality Control) and take appropriate action.
- Demonstrate critical-thinking and judgment skills appropriate to a given situation.
- Independently prepare papers, laboratory reports and take paper, computer and laboratory practical examinations.
Essential Behavioral Requirements for Medical Laboratory Science

The Medical Laboratory Science student must be able to:

• Organize work and perform multiple tasks within given time constraints and under stressful conditions, while maintaining the ability to communicate clearly.
• Be able to manage the use of time and be able to systematize actions, in order to complete professional and technical tasks within realistic constraints.
• Possess the emotional health necessary to effectively apply knowledge and exercise appropriate judgment.
• Be able to provide professional and technical services while experiencing the stresses of task-related uncertainty (i.e., ambiguous test order, ambivalent test interpretation), emergent demands (i.e., "stat" test order) and distracting environment (i.e., high noise levels, crowding, complex visual stimuli).
• Be flexible and creative and adapt to professional and technical change.
• Recognize potentially hazardous materials, equipment and situations and proceed safely, in order to minimize risk of injury to patients, self and nearby individuals.
• Adapt to working with unpleasant biologicals
• Support and promote the activities of fellow students and of healthcare professionals. Promotion of peers helps furnish a team approach to learning, task completion, problem solving and patient care.
• Be honest, compassionate, ethical and responsible. The student must be forthright about errors or uncertainty. The student must be able to critically evaluate her or his own performance, accept and act on constructive criticism and look for ways to improve (i.e., participate in enriched educational activities).
• Show respect for individuals of different age, ethnic background, religion and/or sexual orientation.
• Exercise independent judgment and accept responsibility for own work.

In addition, the student must follow all established policies and procedures of the program and clinical affiliate sites.

Telecommunications

Demonstrate these skills:

• Connect to the Internet or an online service
• Use Electronic Mail (compose, send, retrieve, read, respond and open attachments)
• Access and use resources on Internet and World Wide Web

Demonstrate knowledge through practical application:

• Terms such as telecommunications, direct access, dial-in access, modem, baud rate, Internet, World Wide Web
• Obtain/maintain an account on the Internet or an online service that provides Internet access

Expanded Knowledge and Skills

Demonstrate these skills:

• Connect a computer to a modem and telephone line for dial-in access
• Upload a text file and send as electronic mail
• Use specialized e-mail lists relevant to professional information needs
• Create and use group addresses for electronic mail
• Read, save, print, reply to, forward electronic mail