

# NL EMMC School of Medical Laboratory Science

## Technical Standards

The NL EMMC School of Medical Laboratory Science has established minimum essential requirements (separate from academic standards for admission), which every student must meet, with or without reasonable accommodations, in order to participate fully in all aspects of training and eventual employment in the clinical laboratory setting. These essential requirements are divided into observational, movement, communication, intellectual, and behavioral categories.

### **Observational - Ability to participate actively in all demonstrations, laboratory activities, and clinical experiences in the professional program component. Such observation and information requires functional use of visual, auditory, and somatic sensations.**

- Observe laboratory demonstrations in which biologicals (i.e. 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 biologicals, reagents, or chemical reaction products.
- Employ a clinical binocular microscope to discriminate among fine structural and color (hue, shading, and intensity) differences of microscope specimens.
- Read and comprehend text, numbers, and graphs displayed in print and on a video monitor.

### **Movement - Sufficient motor ability to execute the movement and skills required for safe and effective performance of duties.**

- Move freely and safely about a laboratory.
- Reach laboratory benches and shelves, patients lying in hospital beds, or patients seated in specimen collection furniture.
- Travel to clinical laboratory sites for practical experience.
- Perform moderately taxing continuous work, often requiring prolonged sitting or standing, over several hours.
- Maneuver phlebotomy and culture acquisition equipment to safely collect valid laboratory specimens from patients.
- Possess finger and manual dexterity necessary to control laboratory equipment (i.e. pipettes, inoculating loops, test tubes), adjust instruments to perform laboratory procedures, such as handling small tools and/or parts to repair and correct equipment malfunctions, and transferring drops into tubes of small diameter.
- Use a computer keyboard to operate laboratory instruments and to calculate, record, evaluate, and transmit laboratory information.

### **Communication - Ability to communicate effectively in English using verbal, non-verbal, and written formats with faculty, other students, clients, families, and all members of the healthcare team.**

- Read and comprehend technical and professional materials (i.e. textbooks, magazine and journal articles, handbooks, and instruction manuals).
- Follow verbal and written instructions in order to correctly and independently perform laboratory procedures.
- Clearly instruct patients prior to specimen collection.
- Effectively, confidentially, and sensitively converse with patients regarding laboratory tests.
- Communicate with faculty members, fellow students, staff, and other health professionals verbally and in recorded format.
- Independently prepare papers, prepare laboratory reports, and take paper, computer, and laboratory practical examinations.

**Intellectual - Ability to collect, interpret, and integrate information and make decisions.**

- Possess these intellectual skills: comprehension, measurement, mathematical calculation, reasoning, integration, analysis, comparison, self-expression, and criticism.
- Be able to exercise sufficient judgment to recognize and correct performance deviations.
- Apply knowledge to new situations and to problem-solving scenarios.

**Behavioral - Possess the emotional health and stability required for full utilization of the student's intellectual abilities, the exercise of professional judgment, the prompt completion of all academic and patient care responsibilities, and the development of mature, sensitive and effective relationships with faculty, fellow students, clinical instructors, patients, and other members of the healthcare team.**

- Manage heavy academic schedules and deadlines.
- 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.
- Demonstrate appropriate judgment and effectively employ intellect under conditions of stress.
- Be able to provide professional and technical services while experiencing the stresses of task-related uncertainty (i.e. ambiguous test ordering, ambivalent test interpretation), emergent demands (i.e. stat test orders), and a 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. Accept responsibility and accountability for one's own actions. The student must be forthright about errors or uncertainty. The student must be able to critically evaluate her or his own performance, accept constructive criticism, and look for ways to improve (i.e. participate in enriched educational activities). The student must be able to evaluate the performance of fellow students and tactfully offer constructive comments.
- Show respect for diversity: works well with individuals of different age, ethnic background, religion, sexual orientation and/or educational backgrounds.
- Exhibit professional behavior by conforming to appropriate standards of dress, appearance, language, and public behavior.

**I have read and understood the technical standards and all questions were answered to my satisfaction. As of this date I can meet these basic academic and non-academic standards.**

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Student's Printed Name

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Student's Signature

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Date

Adapted from Fritsma, George A., Fiorella, Beverly J. & Murphy, Maryrose. (Jan/Feb. 1996). Essential Requirements for Clinical Laboratory Science. Clinical Laboratory Science, 9, 40-43.