

## *Program in Clinical Laboratory Science*

### *CLS Essential Requirements*

**Table 1 - Essential Observational Requirements**

The Student must be able to:

- Observe laboratory demonstrations in which biologicals (blood and bone marrow, body fluids, culture materials, tissue sections, cellular specimens) are processed and handled,
- Characterize the color, odor, clarity, and viscosity of biologicals, reagents or chemical reaction products,
- Employ a clinical grade binocular microscope to discriminate among fine structural and color (hue, shading and intensity) differences of biological specimens,
- Read and comprehend text, numbers, and graphic materials displayed in print and on a video monitor.

**Table 2 - Essential Movement Requirements**

The Student must be able to:

- Move freely and safely about the laboratory,
- Reach laboratory bench tops and shelves, patients lying in hospital beds, or patients seated in specimen collection furniture,
- Travel to selected sites for practical and seminar experiences,
- Perform moderately taxing continuous physical work, often requiring prolonged sitting or standing over several hours,
- maneuver phlebotomy equipment to safely collect valid laboratory specimens from patients,
- Control laboratory equipment (pipettes, inoculating loops, test tubes) and adjust instruments to perform laboratory procedures,
- Use an electronic keyboard to operate laboratory instruments and calculate, record, evaluate and transmit laboratory information.

**Table 3 - Essential Intellectual Requirements**

The Student must:

- 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.

#### **Table 4 - Essential Communication Requirements**

The Student must be able to:

- Demonstrate effective written and oral communication skills in the English language,
- Read and comprehend technical and professional materials (textbooks, journal articles, handbooks, instruction manuals),
- Follow verbal and written instructions to correctly and independently perform laboratory procedures,
- Clearly instruct patients prior to specimen collection,
- Converse with patients effectively, confidentially, and sensitively,
- Communicate with faculty members, fellow students, staff, and other health care professionals in written and verbal formats,
- Independently prepare papers and laboratory reports,
- Take paper, computer, and laboratory practical examinations.

#### **Table 5 - Essential Behavioral Requirements**

The Student must:

- Be able to manage time and systematize actions to complete professional and technical tasks within realistic constraints,
- Possess the emotional health necessary to effectively employ intellect and exercise appropriate judgment,
- Be able to provide professional and technical services while experiencing stresses of task-related uncertainty (ambiguous test ordering, ambivalent test interpretation), emergent demands (stat test orders), and a distracting environment (high noise levels, crowding, complex visual stimuli),
- Be flexible and adapt to professional and technical changes,
- Recognize potentially hazardous materials, equipment and situations and proceed safely to minimize risk of injury to patients, self, and nearby individuals,
- Adapt to working with unpleasant biologicals,
- Support activities of fellow students and staff to promote a team approach to learning, task completion, problem solving, and patient care,
- Be honest, compassionate, ethical and responsible; be forthright about errors or uncertainty; critically evaluate own and others' performance; offer and accept constructive criticism; seek out ways to improve.

Note: These lists are not inclusive of all functions.