



## **Course Description**

### **MLT2192L | Histotechnology 2 Laboratory | 2.00 credits**

This course is a continuation of Histotechnology Lab 1. Students will be introduced to more complex laboratory techniques in histotechnology. Prerequisite: MLT1191L; corequisite: MLT2192

### **Course Competencies:**

**Competency 1:** The students will demonstrate knowledge, comprehension and application of microtomy and frozen sectioning by:

1. Using hand eye coordination when performing the following: Performing frozen sectioning Performing microtomy Embedding tissue Staining slides with H and E
2. Troubleshooting the following instruments Microtome Cryostat Water-bath Slide Drying Ovens Tissue Processor
3. Troubleshooting the staining of frozen sections

**Competency 2:** The student will demonstrate knowledge and comprehension of a variety human tissue processing by:

1. Preparing a variety of human tissue specimens for processing to include but not limited to; brain, kidney, liver, bone, and other human tissue specimens

**Competency 3:** The students will demonstrate knowledge, comprehension, and application of advance fixation techniques by:

2. Explaining the preparation and used of the following common fixatives used in the histotechnology laboratory to include; B-5, Helly's, Zenker's, Carnoy's, FAB and others

### **Learning Outcomes:**

- Communicate effectively using listening, speaking, reading, and writing skills
- Use quantitative analytical skills to evaluate and process numerical data
- Solve problems using critical and creative thinking and scientific reasoning
- Formulate strategies to locate, evaluate, and apply information
- Demonstrate knowledge of diverse cultures, including global and historical perspectives
- Use computer and emerging technologies effectively
- Describe how natural systems function and recognize the impact of humans on the environment