

# Course Competency

## MLT 1840L HISTOTECH PRACTCUM 1

### Course Description

This is an in-house clinical experience in which students will further learn the techniques of processing human tissue for histological purposes. Therefore, further developing the needed skills to be placed at a clinical site the following semester. Prerequisites: MLT 1191, 1191L, 2192 , 2192L, 2198. 2198L. (15 hr. clinic)

Course Competency	Learning Outcomes
<p><b>Competency 1:</b>The student will demonstrate the ability to perform grossing and accessioning of tissue specimens by:</p>	<ol style="list-style-type: none"> <li>1. Communication</li> <li>2. Numbers / Data</li> <li>3. Critical thinking</li> <li>4. Ethical Issues</li> <li>5. Computer / Technology Usage</li> <li>6. Aesthetic / Creative Activities</li> <li>7. Environmental Responsibility</li> <li>8. Social Responsibility</li> </ol>
<ol style="list-style-type: none"> <li>1. Aiding pathologist, pathologist assistant or histotechnologist in the numbering and sectioning of clinical tissue specimens</li> <li>2. Sectioning clinical tissue specimens using as required through instruction by the pathologist, pathologist assistant or histotechnologist</li> <li>3. Learning to use the hospitals' and or laboratory's computer systems to accession speimen</li> </ol>	
<p><b>Competency 2:</b>The student will demonstrate the ability to perform tissue processing by:</p>	
<ol style="list-style-type: none"> <li>1. Performing routine maintenance on laboratory's tissue processing equipment</li> <li>2. Recording required changes or maintenance of the laboratory's tissue processing equipment when necessary</li> <li>3. Understanding and explaining the different</li> </ol>	

aspects of tissue processing	
<b>Competency 3:</b> The student will demonstrate the ability to perform embedding techniques by:	
<ol style="list-style-type: none"> <li>1. Demonstrating proper embedding techniques as required for different tissue specimens, including but not limited to: skin, gi, tubes and bone</li> <li>2. Demonstrating re-embedding of tissue specimens when embedding has been done incorrectly</li> </ol>	
<b>Competency 4:</b> The student will demonstrate the ability to use a microtome to cut human and/or animal tissue by:	
<ol style="list-style-type: none"> <li>1. Describing the operation of microtomy equipment including the clinical cryostat</li> <li>2. Performing tissue microtomy as required by type of tissue specimen</li> <li>3. Performing routine maintenance on microtomy equipment</li> <li>4. Performing frozen sections of clinical specimens if required</li> </ol>	
<b>Competency 5:</b> The student will demonstrate the ability to follow standard operating procedures with respect to hematoxylin and eosin staining, histochemical techniques, quality control, and laboratory safetyThe student will demonstrate the ability to perform Hematoxylin and eosin techniques by:	<ol style="list-style-type: none"> <li>1. Communication</li> <li>2. Critical thinking</li> <li>3. Information Literacy</li> <li>4. Cultural / Global Perspective</li> <li>5. Social Responsibility</li> <li>6. Ethical Issues</li> <li>7. Computer / Technology Usage</li> <li>8. Aesthetic / Creative Activities</li> <li>9. Environmental Responsibility</li> </ol>
<ol style="list-style-type: none"> <li>1. Describing parameters needed for routing Hematoxylin and Eosin techniques as well as histochemical techniques</li> <li>2. Performing manual or automated progressive or regressive Hematoxylin and Eosin techniques on tissue specimen slides</li> <li>3. Troubleshooting and explaining corrective actions for Hematoxylin and Eosin</li> </ol>	

<p>techniques on tissue specimen slides</p> <ol style="list-style-type: none"> <li>4. Performing maintenance of manual or automate Hematoxylin and Eosin staining techniques as well as histochemical techniques</li> <li>5. Understand and explaining the need of quality control in routine Hematoxylin and Eosin staining techniques as well as histochemical techniques</li> </ol>	
<p><b>Competency 6:</b> The student will demonstrate the ability to communicate and use interpersonal skills effectively by:</p>	
<ol style="list-style-type: none"> <li>1. Demonstrating ability to give and follow directions</li> <li>2. Distinguishing between factual laboratory results and personal opinion</li> <li>3. Recognizing the importance of courtesy and respect for patients and other laboratory personnel and maintains good interpersonal relationships</li> <li>4. Following all federal and state regulations concerning patient information, or test results</li> <li>5. Following and performing all components laboratory safety when performing, tissue processing, fixation, microtomy, embedding, histochemistry and working with volatile chemicals.</li> </ol>	

Updated: FALL TERM 2022