

## **MLT 2198L HISTOCHEMISTRY LAB**

## **Course Description**

This course will introduce students to the preparation, purpose, quality control equipment, fixatives, and results of histochemical staining techniques (special stains) including an introduction to immuno-histochemistry and enzyme-histochemistry techniques. The students will perform special stains on nervous, kidney, bone, bone marrow and muscle tissue as well as any other tissue deemed necessary by instructor. (3 credit laboratory)

Course Competency	Learning Outcomes
Competency 1: The student will demonstrate knowledge, comprehension and application of histochemical identification of complex compounds in tissues by	<ol> <li>Communication</li> <li>Numbers / Data</li> <li>Critical thinking</li> <li>Information Literacy</li> <li>Cultural / Global Perspective</li> <li>Computer / Technology Usage</li> <li>Aesthetic / Creative Activities</li> </ol>
<ol> <li>Preparing special stains to be used for various tissue types</li> <li>Staining and identifying various types of tissue as well as various diseases and organisms</li> <li>Staining and identifying pigments and minerals</li> <li>Evaluating results of hematoxylin and eosin stains</li> <li>Recommending changes to improperly stained H and E slides</li> <li>Evaluating special stains of various tissue types</li> </ol>	
Competency 2: The student will demonstrate knowledge, comprehension and application of histochemical staining procedures by	<ol> <li>Communication</li> <li>Numbers / Data</li> <li>Critical thinking</li> <li>Information Literacy</li> <li>Cultural / Global Perspective</li> </ol>

	6. Computer / Technology Usage 7. Aesthetic / Creative Activities
<ol> <li>Recommending changes to improperly done special stains involving different tissue types</li> <li>Listing and evaluating special staining techniques to identify foreign material, microorganisms or anatomical and pathological issues in various tissue types.</li> <li>Recommending actions for improperly performed special staining techniques</li> </ol>	
Competency 3: The student will demonstrate a rudimentary knowledge, comprehension and application of immuno-histochemical staining procedures by	<ol> <li>Communication</li> <li>Numbers / Data</li> <li>Critical thinking</li> <li>Information Literacy</li> <li>Cultural / Global Perspective</li> <li>Computer / Technology Usage</li> <li>Aesthetic / Creative Activities</li> </ol>
Observing and evaluating immuno- peroxidase staining procedures     Explaining troubleshooting in immuno- peroxidase staining procedures	

Updated: FALL TERM 2023