

Course Description

MLT2198L | Histochemistry Laboratory | 3.00 credits

This course will introduce students to biochemicals used in histology with emphasis on laboratory preparation and use of histochemical and immune histochemical stains. Prerequisite: CHM1033L; corequisite: MLT2198.

Course Competencies:

Competency 1: The student will demonstrate knowledge, comprehension and application of histochemical identification of complex compounds in tissues by:

- 1. Preparing special stains to be used for various tissue types
- 2. Staining and identifying various types of tissue as well as various diseases and organisms
- 3. Staining and identifying pigments and minerals
- 4. Evaluating results of hematoxylin and eosin stains
- 5. Recommending changes to improperly stained H and E slides
- 6. Evaluating special stains of various tissue types

Competency 2: The student will demonstrate knowledge, comprehension and application of histochemical staining procedures by:

- 1. Recommending changes to improperly done special stains involving different tissue types
- 2. Listing and evaluating special staining techniques to identify foreign material, microorganisms or anatomical and pathological issues in various tissue types
- 3. Recommending actions for improperly performed special staining techniques

Competency 3: The student will demonstrate a rudimentary knowledge, comprehension and application of immuno-histochemical staining procedures by

- 1. Observing and evaluating immuno- peroxidase staining procedures
- 2. Explaining troubleshooting in immuno- peroxidase staining procedures

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
- Demonstrate an appreciation for aesthetics and creative activities