



MED 218: Selected Topics in Clinical Laboratory Science

This course offers students an opportunity to study a specific topic in Clinical Laboratory Science. Course topics are announced each semester. Prerequisite: to be determined by the course offered. One to three class hours per week. Instructional Support Fee applies.

Course Student Learning Outcomes

1. Identify the microanatomical features of the major body organs.
2. Describe the processing and handling of surgical and autopsy specimens.
3. Discuss the process of gross evaluation of tissues.
4. List and describe the steps involved in tissue processing including: fixations and embedding techniques.
5. Describe the procedures required to prepare and adequately fix tissue blocks including decalcification.
6. List the steps involved in tissue sectioning by microtomy and the production of a paraffin section.
7. Describe the procedure for preparation of a frozen section for microscopic evaluation.
8. List the instrument used in the histology department.
9. List and describe routine and special stains and techniques.

1

1. List and describe the steps of the Hematoxylin and Eosin staining technique to produce a coverslipped section suitable for microscopic evaluation.

1

1. Describe the immunohistochemistry and molecular applications currently used in the diagnosis of malignancy.

1

1. Discuss microwave technology applications in tissue evaluation.

1

1. Describe the procedure used to detect amyloid substances.

1

1. Describe the safety procedures necessary to comply with OSHA regulations.

1

1. List and discuss quality assurance and quality control procedures necessary to ensure accuracy and precision in the performance of histological techniques procedures.

Credits: 3

Program: Medical Laboratory Technology