

CYTO - Cytotechnology

CYTO 403 Gynecological Screening Laboratory (3 Credit Hours)

Laboratory experience in the screening of gynecological smears.

Prerequisites: Acceptance into the Cytotechnology Program and/or permission of the cytotechnology program director

Pre- or corequisite: CYTO 405 and CYTO 415

CYTO 404 General Pathology (3 Credit Hours)

This course is an overview of general disease processes and causes in the human. All body systems will be covered including respiratory, gastrointestinal, circulatory, nervous, reproductive, and urinary. Aging, dietary, and stress factors will be discussed in the disease process. Bacteria, fungi, and viruses will be discussed in general and for each body system. Neoplasms will be covered for each body site. This course will be of benefit to anyone interested in diseases of the human body or entering the medical field. (cross listed with MLS 401)

Prerequisites: junior standing

Pre- or corequisite: BIOL 250 and BIOL 251 or equivalent

CYTO 405 Normal Gynecological Cytology (3 Credit Hours)

Introduction to histological and cytological features of the normal female genital tract with emphasis on normal and non-neoplastic abnormalities. Principles of cytological diagnostic techniques will be discussed.

Prerequisites: Acceptance into the Cytotechnology Program or permission of program director

Pre- or corequisite: CYTO 403

CYTO 407 Clinical Histology (3 Credit Hours)

This course consists of the systematic study of cellular components as well as the grouping/organization of tissues into major 'organ' systems. Additionally, the cellular basis of examples of human diseases will be studied. Microscopic and virtual identification and morphology of cells, tissues, and organ substructures will be emphasized. This course will be of benefit to anyone interested in diseases of the human body or entering the medical field.

Prerequisites: permission of the instructor

CYTO 415 Abnormal Gynecological Cytology (4 Credit Hours)

Introduction to diagnostic cytological techniques and pathology of the female reproductive tract with emphasis on premalignant and malignant changes.

Pre- or corequisite: CYTO 403 and CYTO 405

CYTO 424 Respiratory Cytology (4 Credit Hours)

Principles of diagnostic cytology and pathology of the respiratory tract, including benign conditions, inflammatory and infectious diseases, premalignant conditions and primary and metastatic malignancies.

Prerequisites: Admission to the cytotechnology program

Pre- or corequisite: CYTO 405 and CYTO 415

CYTO 428W Cytopreparatory Techniques and Procedures (3 Credit Hours)

Introduction to collection, processing and preparation of cytologic specimens from all body sites and general laboratory procedures and regulations. A portion of this course consists of practical experience acquired in the laboratory. Practical experience will be perfected during clinical site rotations throughout the Cytotechnology Program. Students will learn how to properly write lab reports and papers related to health science fields. This is a writing intensive course.

Prerequisites: Pre-admission to the Cytotechnology Program or Program Director permission; completion of ENGL 110C and ENGL 211C or ENGL 221C or ENGL 231C with a grade of C or higher

CYTO 430 Cytopreparation & Ancillary Techniques (4 Credit Hours)

The course offers an introduction to cytopreparation and ancillary diagnostic techniques. Upon completion, students should be able to understand the principles of cytology preparatory techniques as well as fixation and staining theory and use. In addition, students will learn the application and interpretation of various special and immunohistochemical stains, and understand the various molecular tests available for use in cytopathology.

Prerequisites: CYTO 404

Pre- or corequisite: CYTO 403, CYTO 405 and CYTO 415

CYTO 442 Gastro-Intestinal Cytology (2 Credit Hours)

Study of the pathology and cytology of the gastro-intestinal tract, including the oral cavity, esophagus, stomach, colon, and rectum. Emphasis on normal conditions, benign inflammatory, infections, parasitic conditions, gastric ulcers, premalignant and malignant lesions.

Pre- or corequisite: CYTO 405 and CYTO 415

CYTO 444 Genitourinary Cytology (2 Credit Hours)

Study of the pathology and cytology of the genitourinary tract, with emphasis in normal conditions, benign inflammatory and infectious conditions, crystals, premalignant and malignant lesions.

Pre- or corequisite: CYTO 405 and CYTO 415

CYTO 445 Breast Cytology (2 Credit Hours)

Study of pathology and cytology of the breast, with emphasis on benign, inflammatory conditions, premalignant and malignant disease in both breast smears and fine needle aspirations.

Prerequisites: CYTO 407

Pre- or corequisite: CYTO 405 and CYTO 415

CYTO 446 Body Fluids Cytology (3 Credit Hours)

Study of the pleural, peritoneal and pericardial cavity fluids, synovial and cerebral spinal fluids, with emphasis on benign, inflammatory conditions, and primary and metastatic malignancies.

Prerequisites: CYTO 407

Pre- or corequisite: CYTO 405 and CYTO 415

CYTO 448 Non-Epithelial Cytology (1 Credit Hour)

Study of the pathology and cytology of non-epithelial lesions with emphasis on benign, inflammatory, and malignant conditions.

Prerequisites: Admission to the cytotechnology program

Pre- or corequisite: CYTO 405, CYTO 415, CYTO 424, CYTO 444, CYTO 445, and CYTO 446

CYTO 456 Fine Needle Aspiration Cytology I (3 Credit Hours)

Study of specialized collection techniques, processing and diagnosis of fine needle aspirations from various body sites, including thyroid, liver, lymph nodes, pancreas, lung, mediastinum, salivary gland, and ovary. Clinical practical application of these principles will be continued at the clinical sites.

Prerequisites: CYTO 403, CYTO 405, CYTO 415, and CYTO 428W

CYTO 457 Fine Needle Aspiration Cytology II (3 Credit Hours)

Study of specialized collection techniques, processing and diagnosis of fine needle aspirations from various body sites, including kidney, retroperitoneum, breast, soft tissue, bone, eye, central nervous system, and skin. Clinical practical application of these principles will be continued at the clinical sites.

Prerequisites: CYTO 403, CYTO 405, CYTO 415, CYTO 424, CYTO 428W, CYTO 445, CYTO 446, CYTO 448, and CYTO 456

CYTO 458 Cytology Internship I (3 Credit Hours)

Directly supervised experience in a clinical setting: includes evaluation of gynecologic smears and study set assignments. Students will be exposed to cytopreparatory techniques.

Pre- or corequisite: CYTO 405 and CYTO 415

CYTO 468 Cytology Internship II (4 Credit Hours)

Directly supervised experience in a clinical setting. Includes evaluation of gynecologic and non-gynecologic specimen slides and study set assignments. Students will pre-screen gynecologic and non-gynecologic smears and study set assignments. Students will be exposed to cytopreparatory techniques.

Pre- or corequisite: CYTO 405, CYTO 415, CYTO 424, CYTO 444, CYTO 445, and CYTO 446

CYTO 478 Cytology Internship III (8 Credit Hours)

Directly supervised experience in a clinical setting. Includes evaluation of gynecologic and non-gynecologic smears and study set assignments. Students will be exposed to cytopreparatory techniques.

Prerequisites: Admission to the cytotechnology program

Pre- or corequisite: CYTO 405, CYTO 415, CYTO 424, CYTO 444, CYTO 445, CYTO 446, CYTO 456, and CYTO 457

CYTO 495 Topics in Cytology (1-3 Credit Hours)

Independent study of selected topics in clinical cytology. Review of cytologic specimens from various body sites

Prerequisites: permission of the program director

CYTO 497 Cytology Senior Seminar (1 Credit Hour)

Supervised experience consists of clinical cases and seminar presentations into current advances within the specialty of clinical cytology. A student research project and oral presentation of current journal articles and the research paper are required.

Prerequisites: permission of the program director

CYTO 498 Topics (1-3 Credit Hours)**CYTO 499 Comprehensive Cytology Review (1 Credit Hour)**

The course is a comprehensive review course that includes the review and study of the exfoliative and non-exfoliative (including fine needle aspirations) cytomorphologic features of neoplastic and non-neoplastic lesions of the female genital tract, respiratory tract, urinary tract, body fluids, lymph nodes, thyroid, salivary glands, pancreas and biliary tract, the diagnostic pitfalls associated with the various body sites, the appropriate use of ancillary techniques in diagnostic cytology, the principles of quality assurance, and the new developments in the field of cytopathology.

Prerequisites: CYTO 403, CYTO 405, CYTO 415, CYTO 424, CYTO 428W, CYTO 442, CYTO 444, CYTO 445, CYTO 446, CYTO 448, CYTO 456, CYTO 457, CYTO 458, and CYTO 468