CT - Cytotechnology

Course Descriptions - Cytotechnology (CT)

CT 400. Introduction to Cytology and Pathology.---Cytology as a health profession; historical development, purpose, and ethics of cytology; proper use of microscope; classification of cells and tissue; cell activity, injury, degeneration, and death; cytogenetics; neoplasia and general criteria of malignancy; cellular injury and adaptation; inflammation and repair; immunopathology; and hemodynamic derangements. Prerequisite: admission to program. 3 hours.

CT 401. Cytology of Female Genital Tract I.---Anatomy, histology, and normal cytology of female genital tract; cyclic changes in vaginal, cervical, and endometrial epithelium; histology and cytology of pregnancy and menopause; vaginal flora and parasites; hormonal cytology and endocrinopathies; cytologic effects of parasites, viruses, bacteria, and fungi. Prerequisite: admission to program. 4 hours.

CT 402. Cytology of Female Genital Tract II.---Cytology of precancerous lesions and malignant tumors of female genital tract with reference to clinical aspects, degrees, and types of tumors; effects of radiation and chemotherapy; reporting systems. Prerequisite: admission to program. 6 hours.

CT 403. Cytoprep and Staining Techniques.---Genital and extragenital material handling, routine and special preparatory techniques, Papainicaloau staining principles and procedure, special stains, record keeping, and filing of slides. Prerequisite: admission to program. 2 hours.

CT 410. Respiratory Cytology.---Anatomy, histology, and normal and abnormal cytology of neoplastic and non-neoplastic lesions of respiratory tract and pulmonary mycoses. Prerequisites: CT 401, 402. 4 hours.

CT 411. Urinary Tract, Gastrointestinal Tract, Breast, and Aspiration Cytology.---Gross anatomy, histology, and normal and abnormal cytology of urinary tract, gastrointestinal tract, breast, and aspiration cytology. Prerequisites: CT 401, 402. 8 hours.

CT 412. Effusion and CNS Cytology.---Anatomy, histology, and normal and abnormal cytology of diseases involving serous cavities with particular reference to tumor types and primary site of tumors; gross anatomy, histology, and normal and abnormal cytology of central nervous system. Prerequisites: CT 401, 402. 3 hours.

CT 413, 414. Advanced Diagnostic Cytology (GYN and Non-GYN).---Examination of challenging and unusual cases for diagnosis with emphasis on diagnostic pitfalls; opportunity for questions, answers, and constructive criticism. Prerequisites: CT 410, 411, 412. 2 hours each.

CT 490, 491. Clinical Practicum I, II.---Practice in evaluation of cytologic material and initial diagnostic work-up under close supervision. Prerequisites: CT 410, 411, 412. 5 hours each.

CT 493. Research Project.---Student research of topic of current interest including review of literature and clinical material, when available. Material and data collected during spring term; data analyzed and paper
written and presented during summer term. Prerequisites: CT 410, 411, 412. 2 hours.

**CT 494. Journal Club.**--Introduction to literature of cytology. Student review, critique, and presentation of articles of interest for group discussion. Prerequisites: CT 410, 411, 412. 2 hours.

**CT 495. Cytopathology Seminar.**--Participation in and organization of cytopathology seminars with challenging and unusual cases projected for discussion, review, and surgical correlation, adjunct technologies, e.g. immunocyto/histochemistry, flow cytometry, electron microscopy. Prerequisite: admission to program. 2 hours.