Cytotechnology (CYT)

CYT 210. Introduction to Clinical Cytotechnology. 4.0 Credits.  
Class-4.0. Clinical-0.0. Lab-0.0. Work-0.0  
This course provides an overview of the fundamentals of cell biology,  
biological histology, immunology, and laboratory operations and management  
as they relate to clinical cytology. Topics include the cell and cell  
division, histology, inflammatory processes, the immune response, CLIA,  
professional cytology organizations, workloads limits, quality control,  
quality assurance, billing and coding in cytopathology, LIS systems and  
ethics. Upon completion, students should be able to understand basic cell  
biology, histology, immunologic processes, informatics, and the ethical role  
and responsibilities of the cytotecnologist in healthcare.  
Corequisites: Take CYT 212, CYT 214, CYT 216 and CYT 222

CYT 212. Intro to Cyto Techniques. 4.0 Credits.  
Class-4.0. Clinical-0.0. Lab-0.0. Work-0.0  
The course covers care and use of the light microscope and histological  
and cytological specimen preparation techniques and equipment. Topics  
include laboratory safety, chemical hygiene, universal precautions, and  
fundamentals of staining and fixation. Upon completion, students should  
be able to discuss and demonstrate the care and use of the microscope  
and discuss basic concepts of staining and fixation.  
Corequisites: Take CYT 210, CYT 212, CYT 214 and CYT 222

CYT 214. Gynecological Cytology. 14.0 Credits.  
Class-8.0. Clinical-0.0. Lab-12.0. Work-0.0  
This course covers gynecologic cytology, including, normal cytology,  
preeclampsies, malignancies, and treatment modalities. Topics include  
anatomy, physiology, histology, and embryology of the female genital  
tact and breast; normal cytology, hormonal cytology, microorganisms,  
precancerous lesions, carcinomas, treatment modalities, extraterine and  
uncommon tumors, and FNA of the gonads and breast. Upon completion,  
students should be able to microscopically identify and discriminate  
between normal and pathological processes in the female genital tract or  
breast.  
Corequisites: Take CYT 210, CYT 212, CYT 216 and CYT 222

CYT 216. Clinical and Diagnostic Interpretation I. 4.0 Credits.  
Class-4.0. Clinical-0.0. Lab-0.0. Work-0.0  
This course covers cytologic criteria and clinical correlations for  
representative cytologic and histologic specimens from the female genital  
tact. Emphasis is placed on the cytology and histology of the female  
genital system through unknown cases and image exercises. Upon completion,  
students should be able to detect, diagnose, and appropriately mark cells  
representative of any normal or pathological process from the female  
genital system.  
Corequisites: Take CYT 210, CYT 212, CYT 214 and CYT 222

CYT 220. Non-Gynecological Cytology. 12.0 Credits.  
Class-8.0. Clinical-0.0. Lab-8.0. Work-0.0  
This course covers non-gynecologic cytology and fine needle aspiration  
bioy of all body sites. Topics include the anatomy, histology, pathology,  
and cytopathology of the respiratory tract, body cavities, urinary tract,  
gastrointestinal tract, head and neck, and central nervous system.  
Upon completion, students should be able to microscopically identify  
and discriminate between normal and pathological processes in non-  
gynecologic cytology.  
Prerequisites: Take CYT 210, CYT 212, CYT 214, CYT 216, and CYT 222  
Corequisites: Take CYT 224, CYT 226, CYT 236 and CYT 238

CYT 222. Cytopreparation Technique. 2.0 Credits.  
Class-2.0. Clinical-0.0. Lab-0.0. Work-0.0  
This course covers the fundamental principles of cytopreparation for  
cytological specimens. Emphasis is placed on techniques related to  
cytopreparation. Upon completion, students should be able to demonstrate  
competence in the various cytopreparation methods.  
Corequisites: Take CYT 210, CYT 212, CYT 214 and CYT 216

CYT 224. Gynecological Cytology Clinical Practicum I. 4.0 Credits.  
Class-0.0. Clinical-12.0. Lab-0.0. Work-0.0  
This course provides supervised clinical experience in gynecologic  
cytology. Emphasis is placed on cytological diagnosis by routine screening  
and observation of various procedures relevant to gynecologic cytology.  
Upon completion, students should be able to demonstrate mastery of all  
diagnostic skills.  
Prerequisites: Take All: CYT 210, CYT 212, CYT 214, CYT 216, and CYT 222  
Corequisites: Take CYT 220, CYT 222, CYT 236 and CYT 238

CYT 226. Clinical and Diagnostic Interpretation II. 4.0 Credits.  
Class-4.0. Clinical-0.0. Lab-0.0. Work-0.0  
This course covers cytologic criteria and clinical correlations for  
representative cytologic and histologic specimens from non-gynecologic  
body sites. Emphasis is placed on the cytology and histology of non-  
gynecologic body sites through unknown cases and image exercises.  
Upon completion, students should be able to detect, diagnose, and  
appropriately mark cells representative of any normal or pathological  
process from non-gynecologic body sites.  
Prerequisites: Take All: CYT 210, CYT 212, CYT 214, CYT 216, and CYT 222  
Corequisites: Take CYT 220, CYT 224, CYT 236 and CYT 238

CYT 230. Non-Gynecological Cytology Clinical Practicum. 2.0 Credits.  
Class-0.0. Clinical-6.0. Lab-0.0. Work-0.0  
This course provides supervised clinical experience in non-gynecological  
cytological procedures. Emphasis is placed on differential diagnosis in  
non-gynecological cytology. Upon completion, students should be able to  
demonstrate mastery of all diagnostic skills with a minimum competence of  
80%.  
Prerequisites: Take All: CYT 220, CYT 224, CYT 226, CYT 236, and CYT 238  
Corequisites: Take CYT 232 and CYT 234

CYT 232. Clinical Cytology Practicum. 1.0 Credit.  
Class-0.0. Clinical-3.0. Lab-0.0. Work-0.0  
This course provides supervised clinical experience in a variety of  
clinical settings. Emphasis is placed on teamwork in the clinical setting  
with utilization of cytodagnostic and cytopreparation skills. Upon  
completion, students should be able to function effectively as an entry-  
level cytotechnologist.  
Prerequisites: Take All: CYT 220, CYT 224, CYT 226, CYT 236, and CYT 238  
Corequisites: Take CYT 230 and CYT 234

CYT 234. Gynecological Cytology Clinical Practicum II. 3.0 Credits.  
Class-0.0. Clinical-9.0. Lab-0.0. Work-0.0  
This course provides supervised clinical experience in gynecological  
cytological procedures. Emphasis is placed on the development of solid  
working criteria in routine cytology screening. Upon completion, students  
should be able to demonstrate mastery of all diagnostic skills with a  
minimum competence of 80%.  
Prerequisites: Take All: CYT 220, CYT 224, CYT 226, CYT 236, and CYT 238  
Corequisites: Take CYT 230 and CYT 232
**CYT 236. Cytology Literature Review. 1.0 Credit.** Class-1.0. Clinical-0.0. Lab-0.0. Work-0.0

This course covers the review and critique of medical literature with emphasis placed on topics in cytopathology. Topics include gynecologic and non-gynecologic cytology. Upon completion, students should be able to analyze, critique, and present scientific articles.

Prerequisites: Take All: CYT 210, CYT 212, CYT 214, CYT 216, and CYT 222

Corequisites: Take CYT 220, CYT 224, CYT 226 and CYT 238

**CYT 238. Ancillary Studies in Cytopathology. 2.0 Credits.** Class-2.0. Clinical-0.0. Lab-0.0. Work-0.0

This course covers the fundamental principles and applications of special and immunohistochemical staining, as well as the principles and applications of molecular testing as they relate to the cytopathology laboratory. Emphasis is placed on the types of special stains used in cytopathology, on identifying positive and negative staining results, and on the application of molecular testing in cytopathology. Upon completion, students should be able to understand the application and interpretation of various special and immunohistochemical stains, and understand the various molecular tests available for use in cytopathology.

Prerequisites: Take All: CYT 210, CYT 212, CYT 214, CYT 216, and CYT 222

Corequisites: Take CYT 220, CYT 224, CYT 226 and CYT 236