

## Histotechnology (HSTY)

### HSTY 1100 Introduction to Histotechnology

4 Credits

*Prerequisite: admission to the Histotechnology program.*

This course provides an introduction to histology laboratory operations, cellular morphology, and the professional responsibilities of the histotechnician. The course emphasizes organization, terminology, specimen accession, record keeping, quality assurance, OSHA regulations, quality improvement, principles and concepts of medical ethics, and legal issues. Upon completion of the course, students should be able to describe the requirements and responsibilities in the daily operation of a histology laboratory.  
(6 contact hours: 3 lecture, 3 lab)

### HSTY 2050 Histochemistry

4 Credits

*Prerequisite: HSTY 1100.*

This course provides practical and theoretical training in specialized staining techniques used in diagnostic pathology. Laboratory procedures include performing stains used to identify nuclear characteristics, cytoplasmic characteristics, carbohydrates, lipids, pigments, nervous tissue, and enzymes.  
(8 contact hours: 2 lecture, 6 lab)

### HSTY 2100 Histology

3 Credits

*Prerequisite: admission to the Histotechnology program or permission of program director.*

This course specializes in the study of cells, tissues, and organ systems. Students will learn to identify various types of tissue, including epithelial cells, muscle cells, connective tissue, and nerve tissue. The course emphasizes anatomical and functional relationships of tissue.  
(5 contact hours: 2 lecture, 3 lab)

### HSTY 2151 Specialty Areas in Histotechnology

3 Credits

*Prerequisite: admission to Histotechnology or permission of program director.*

This course provides in-depth examination of non-routine specialty areas that a histotechnician may encounter in the workplace. Topics include immunohistochemistry, autopsy procedures, electron microscopy, molecular diagnostics, grossing, Mohs, and cytoprep techniques. The course will also explore quality management and the inspection process.  
(3 contact hours)

### HSTY 2220 Theory and Practice of Immunohistochemistry

2 Credits

*Prerequisite: HSTY 1100.*

The course introduces the fundamentals of immunohistochemistry as applied to the theory and techniques used in the histopathology laboratory. The students will acquire basic knowledge of how immunology is applied in the department of immunohistochemical reagents and techniques. Students will also study in-situ hybridization and tissue microarrays.  
(2 contact hours)

### HSTY 2250 Histotechnique

3 Credits

*Prerequisite: HSTY 1100.*

This course specializes in standard methods used for the preparation of tissue slides for microscopic study by pathologists in their diagnosis of tissue pathology. Laboratory procedures include fixation of tissues, paraffin embedding, sectioning, and basic staining. Student will develop dexterity, speed, and precision in using a microtome.  
(7 contact hours: 1 lecture, 6 lab)

### HSTY 2300 Histotechnician Clinical Directed Practice

5 Credits

*Prerequisite: HSTY 1100, HSTY 2050, HSTY 2100, HSTY 2151, HSTY 2220, HSTY 2250, HSTY 2400 (must be taken concurrently).*

This course includes the practical application of histology procedures learned in previous histology courses. Students will gain experience in histology laboratory procedures in a hospital histology laboratory or associated facilities.  
(25 contact hours: 25 clinical)

### HSTY 2400 Histotechnician Seminar

2 Credits

*Prerequisite: HSTY 2300 (must be taken concurrently).*

This course specializes in issues and trends in histology, healthcare ethics and law, government regulations, professional development, employment opportunities, interviewing techniques, resume writing, and job seeking skills. The course uses case studies to integrate previous course work with clinical experience.  
(2 contact hours)