HISTOTECHNOLOGY

SCHOOL OF MEDICINE

Certificate in Histotechnology

Histotechnology is a structural science that incorporates elements from anatomy, physiology, immunology and chemistry. Histology is the science dealing with the structure, function and chemical composition of cells of normal and abnormal tissue. The histotechnologist prepares tissue specimens for microscopic examination. Histologic techniques utilize the chemical properties of both tissues and dyes to impart color to particular tissue elements to aid identification and disease diagnosis. Histology is an applied laboratory science, whose practitioners are in great demand in the current job market. A certificate in Histotechnology provies intense training in histotechnology through a combination of lectures, hands-on laboratory experience and clinical internships. Some of the certification requirements can be completed with proper selection of courses as University Core Curriculum substitutes and by using elective courses to fulfill certification requirements. Students are encouraged to discuss their interests with a departmental representative to obtain additional information.

This program admits a limited number of students based on specific selection criteria. Applicants must submit additional application materials to be approved for entry into the Histology certificate program. Students will be evaluated on the number of hours of college credit, and college grade point average as calculated by SIUC. Students begin the professional sequence each fall only. This certificate program requires the successful completion of clinical internships. In accordance with Federal and State guidelines, the clinical sites will require proof of the following: vaccination for measles, mumps, rubella, tetanus, TB, and Hepatitis B; current CPR card; and proof of completion of HIPPA and blood-borne pathogens training. Affiliation sites may also require students to undergo a criminal background check and drug screening.

Courses (HTL)

400-5 Histotechnology Practicum I. Designed to introduce students to the basic procedures used in the Histology laboratory. The student studies the principles and theories of fixation and staining processes. Practice and skill are developed in tissue processing, embedding, sectioning and routine staining. Lecture two hours. Laboratory six hours. Special approval needed from the instructor.

401-5 Histotechnology Practicum II. This course introduces students to advanced aspects of histological procedures used in clinical and research settings. The course will focus on immunohistochemistry, enzyme histochemistry and in situ hybridization procedures. The course will also include specialized techniques for water miscible plastics. Lecture two hours. Laboratory 6 hours. Prerequisite: HTL 400 (Histotechnology Practicum I) with a minimum grade of C.

402-3 Special Topics in Histotechnology. The course focuses on 3 microscopy-based methods used in today's research. Topics include confocal/fluorescence microscopy, laser capture microdissection and transmission electron microscopy. Lectures are integrated with hands-on lessons providing students practical experience. Lecture 1 hour, Lab 4 hours. Prerequisite: Histotechnology Practicum I & II (HTL 400 & 401) with a minimum grade of C.

403-2 Laboratory Management and Regulatory Compliance. This course covers the principles of laboratory management and regulatory safety requirements. OSHA's standard for the laboratory safety that incorporates the chemical hygiene plan will be covered. The class will focus on regulations regarding bloodbornes and other potential infectious materials. HIPPA, Ergonomics, DOT and EPA guidelines will be discussed. Lecture 2 hrs.

404-5 Occupational Histotechnology Internship I. Internships are scheduled at clinical affiliate sites throughout southern Illinois during the daytime hours in accordance with the schedule of the assigned clinical site. The curriculum will include both daily instruction and corresponding laboratory experience In a hospital setting, the histotechnologist is not isolated; he/she interacts with other areas besides pathology. The internship provides practical hands-on experience that prepares the student for a career as a histotechnologist. Lecture 1 hour, Internship 10 hours. Prerequisites: Histotechnology 400, 401, 402, 403 with minimum grades of C.

405-5 Occupational Histotechnology Internship II. Internships are scheduled at clinical affiliate sites throughout southern Illinois during the daytime hours in accordance with the schedule of the assigned clinical site. The curriculum will include both daily instruction and corresponding laboratory experience. In a hospital setting, the histotechnologist is not isolated; he/she interacts with other areas besides pathology. The internship provides practical hands-on experience that prepares the student for a career as a histotechnologist. Lecture 1 hour, Internship 10 hours. Prerequisites: Histotechnology 400, 401, 402, 403, 404 with minimum grades of C.