### Histology (HSTL)

**HSTL 451. Oral Histology. 4 hours.**
Comprehensive learning experiences in the structure and function of human tissue, organs, and organ systems with special emphasis on the oral cavity. Course Information: Registration in HSTL 452 is required in the Spring term. Prerequisite(s): Approval of the Department. Students must also register for HSTL 452 in the Spring term.

**HSTL 452. Histology II. 4 hours.**
Continuation of HSTL 451. Provides a baseline of normal structure and function of human tissues necessary for the study of Oral Pathology and advanced courses in Histology. Course Information: Prerequisite(s): HSTL 451; and approval of the department or first year standing in the Doctor of Dental Surgery Program.

**HSTL 503. Biology of Mineralized Tissues. 2 hours.**
Lectures and discussion on the formation, structure, and functions of bone, dentin, and enamel. Emphasizes the mechanisms of mineralization. Course Information: Prerequisite(s): A basic course in histology and consent of the instructor.

**HSTL 504. Fine Structure of Oral Soft Tissues. 2 hours.**
Discussions of electron microscopic research methodologies as applied to oral biology with special emphasis on structural-functional relationships in oral soft tissues. Course Information: Prerequisite(s): HSTL 401 and HSTL 451 or the equivalents and consent of the instructor.

**HSTL 507. Physiological Basis of Pathology. 2 hours.**
Subject matter allied to general pathology but going deeper into physical chemistry and physiological principles, as set forth in N.R. Joseph’s "Comparative Physical Biology". Course Information: Same as PATH 507. Prerequisite(s): HSTL 401 or PATH 421 and PATH 422.

**HSTL 514. Oral Biology Seminar. 1 hour.**
Invited speakers present the progress of current research work in their field of interest related to oral tissues. Course Information: Same as OMDS 527. Satisfactory/Unsatisfactory grading only. Prerequisite(s): Consent of the instructor.

**HSTL 515. Electron Microscopy in Dentistry. 1 hour.**
Principles, theory, and practice of transmission and scanning electron microscopy, and energy dispersive x-ray microanalysis. Processing, sectioning, staining and examination of tissues. Course Information: Same as OMDS 529. Prerequisite(s): Consent of the instructor. Class Schedule Information: To be properly registered, students must enroll in one Laboratory and one Lecture.