### Courses

**PATH 421. General Pathology - Dental. 3 hours.**
Basic principles of pathological processes. Course Information: Prerequisite(s): ANAT 440 and PATH 407 and PHYB 401; or consent of instructor. Class Schedule Information: To be properly registered, students must enroll in one Laboratory and one Lecture.

**PATH 422. Systemic Pathology - Dentistry. 3 hours.**
Disease process affecting specific organs. Course Information: Prerequisite(s): PATH 421. Class Schedule Information: To be properly registered, students must enroll in one Laboratory and one Lecture.

**PATH 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 HSTL 507. Prerequisite(s): HSTL 401; or PATH 421 and PATH 422.

**PATH 510. General Pathology. 3 hours.**
Introduction to the science of disease for graduate students in areas of biomedical research with a focus on the mechanisms of basic pathological processes at the molecular, cellular, tissue, and whole organism levels. Course Information: Prerequisite(s): Consent of the instructor. Recommended background: Basic molecular and cell biology is highly recommended.

**PATH 511. Pathobiology of Cancer. 3 hours.**
Introduction to principles of carcinogenesis, tumor biology, and oncology, including cancer epidemiology, molecular-cellular basis of cancer, tumor progression, invasion and metastasis, and prevention, detection, diagnosis, and therapy of cancer. Course Information: Same as GEMS 512. Prerequisite(s): Consent of the instructor. Recommended background: Basic knowledge of molecular and cell biology is highly recommended.

**PATH 512. Molecular Epidemiology and Biomarkers of Disease. 3 hours.**
Major theoretical concepts and practical issues involved in research involving molecular biomarkers in human populations, emphasizing examples from the cancer research literature. Course Information: Same as EPID 512. Prerequisite(s): Consent of the instructor. Recommended background: Some biology or medical background is recommended for epidemiology students taking this course.

**PATH 513. Special Topics in Pathology. 1-4 hours.**
Topics of current interest in the fields of experimental pathology, cancer biology, molecular epidemiology, experimental design and analysis, biomarker research, and cancer prevention. Course Information: May be repeated. Prerequisite(s): Approval of the department.

**PATH 595. Pathology Seminar and Journal Club. 2 hours.**
Weekly seminar and journal club covering selected fields of interest and research in pathology. Course Information: Satisfactory/Unsatisfactory grading only. Class Schedule Information: To be properly registered, students must enroll in one Conference and one Lecture-Discussion.

**PATH 598. Master’s Thesis Research. 0-16 hours.**
Research in experimental pathology towards a M.S. degree. Course Information: Satisfactory/Unsatisfactory grading only. May be repeated. Students may register in more than one section per term.

**PATH 599. Ph.D. Thesis Research. 0-16 hours.**
Research in experimental pathology towards a Ph.D. degree. Course Information: Satisfactory/Unsatisfactory grading only. May be repeated. Students may register in more than one section per term.