# PATHOLOGY (PATH)

### PATH 5310. Directed Studies. 1-3 Clock Hours.

May be repeated with change of content; maximum credit 6 hours. Students will learn and perform specialized laboratory techniques. **Course Type:** Laboratory

## PATH 5503. Applied Principles of Pathology. 3 Clock Hours.

Basic principles of pathology are related to structural and functional alterations of body tissues and organ systems resulting from disease. Correlation of disease states to underlying pathophysiology and clinical presentation is emphasized.

Course Type: Lecture

## PATH 5980. Research for Masters Thesis. 1-6 Clock Hours.

May be repeated; maximum credit 30 hours. Research for Masters Thesis **Course Type:** Independent Study

### PATH 6010. Pathology Journal Club. 1 Clock Hour.

Prerequisites: None May be repeated; maximum credit 12 hours. Discussions of various current advances in the field of experimental pathology.

Course Type: Lecture

## PATH 6024. Principles of Pathobiology. 4 Clock Hours.

This course is designed to cover the essential principles of the pathologic basis of disease, at the cellular and molecular level. It will emphasize major scientific developments that have provided new insights into our understanding of disease mechanism, using primary interactive and didactic course work.

Course Type: Lecture

## PATH 6043. Care and Use of Research Animals. 3 Clock Hours.

The lecture and laboratory sessions will be used to: correlate the anatomy, physiology, microbiology and pathology of research animals and their diseases; discuss and demonstrate research animal techniques including restraint, sample collection, injections, anesthesia, and euthanasia; evaluate those external influences that alter research data; and select appropriate animal models.

## Course Type: Lecture

### PATH 6053. Mechanisms of Disease. 3 Clock Hours.

This course is designed to bridge basic and clinical aspects of human diseases for students with special interests in the mechanisms of disease processes. Emphasis will be on the latest advancement in the related fields. The format will be lectures and discussions with involvement of the students, e.g. presentation and discussion. **Course Type:** Independent Study

### PATH 6121. Molecular Basis of Human Disease. 1 Credit Hour.

This course has been designed to introduce students 1. To concepts of pathobiology; 2. To link disease conditions with specific molecular/ biochemical pathways. We have selected diseases/disorders that have a major impact on morbibity and mortality in the modern world. These include Neoplastic Diseases, Vascular Disorders, and Emerging Diseases. **Course Type:** Lecture

# PATH 6301. From Cells to Tissue to Molecular Morphology. 1 Clock Hour.

Prerequisites: None. Introduces the student to the basic cell and tissue structure and function and how these cellular characteristics are affected by various procedures such handling, processing, freezing, fixing, and biochemical and molecular biological assays, in vitro and in situ, with an emphasis on DNA, RNA, and Protein preservation. **Course Type:** Lecture

## PATH 6980. Research for Doctors Dissertation. 2-16 Clock Hours.

May be repeated; maximum credit 90 hours. Research for Doctors Dissertation

Course Type: Independent Study

### **PATH 6990.** Special Problems In Pathology. 1-12 Clock Hours. Prerequisites: None. May be repeated; maximum credit 12 hours.

Course Type: Independent Study

## PATH 8411. Anatomic Pathology. 80-160 Clock Hours.

An introduction to diagnostic anatomic pathology. Under the direction of a staff pathologist, the student will assist in the diagnostic evaluation of human tissues by gross and microscopic examination, electron microscopy, immunohistochemistry, flow cytometry and other advanced techniques. The student will also attend and participate in regularly scheduled departmental anatomic pathology conferences. **Course Type:** Clinical

## PATH 8412. Clinical Pathology. 80-160 Clock Hours.

May be repeated; maximum credit 999 hours. An introduction to the clinical laboratories focusing on proper selection and interpretation of laboratory tests. Emphasis will be on the rationale for test selection and pathophysiologic basis for interpretation of results. Pre-analytical and technical factors will be discussed only insofar as they affect selection or interpretation of tests. the student will also attend and participate in the regularly scheduled departmental...

Course Type: Clinical

## PATH 8413. Forensic Pathology. 160 Clock Hours.

The concepts of forensic pathology, toxicology and medical jurisprudence are taught by student participation in the activities of the office of the chief medical examiner. Assistance in autopsies and case investigations provides insight into the operation of the statewide medical-examiner system.

Course Type: Clinical

### PATH 8414. Neuropathology. 160 Clock Hours.

The student will examine current neurosurgical and postmortem neuropathological specimens, as well as biopsies of skeletal muscle and collected material representative of major neurologic diseases. The student will also attend and assist in the preparation of teaching conferences for the departments of pathology, neurology and neurosurgery.

Course Type: Clinical

## PATH 8415. Pediatric Pathology. 160 Clock Hours.

The student will participate in the surgical pathology and autopsy services at Children's Hospital of Oklahoma as well as rotations through sections of the clinical laboratory preforming tests unique to to the sick child. Material from cases representative of major pediatric diseases will be reviewed and the student will attend and assist in the preparation of teaching conferences.

Course Type: Clinical

## PATH 8416. Bacteremia. 80 Clock Hours.

Prerequisites: Must be a medical student in their fourth year of studies. A combined rotation on diagnostic bacteremia with reading assignments in bacteremia/septicemia and septic shock. Course is offered in the microbiology section of the VAMC and is taught in conjunction with internal medicine, surgery, infectious disease and clinical pathology. **Course Type:** Lecture

## PATH 8421. Preceptorship - Baptist Medical Center. 160 Clock Hours.

Under the direction of a staff pathologist, the student will assist with gross and microscopic tissue analysis and correlate the findings with clinical history. The student will also attend conferences including the tumor conference and be assigned readings on pertinent topics. **Course Type:** Clinical

# PATH 9101. Selective in Pathology and Laboratory Medicine. 80 Clock Hours.

Prerequisites: MS 3 or MS 4 standing This selective is designed to provide third year medical students with basic knowledge related to the appropriate use of pathology services and the utility of laboratory information. It also serves as an introduction to the practice of pathology. **Course Type:** Lecture

## PATH 9876. Anatomic Pathology. 160 Clock Hours.

Active participation in areas of anatomic pathology including but not limited to autopsy pathology and surgical pathology. The student will attend and participate in pathology conferences and assist in diagnostic procedures.

Course Type: Clinical

## PATH 9877. Clinical Pathology. 160 Clock Hours.

An introduction to the clinical laboratories with emphasis on proper utilization and choice of laboratory tests. evaluation and interpretation of abnormal results will be correlated with pertinent clinical data and patient chart review.

### Course Type: Clinical

#### PATH 9960. Off-Campus Elective in Pathology. 80-160 Clock Hours.

Prerequisites: Approval of Visiting School and OU Department Course Director. May be repeated; maximum credit 320 hours. An off-campus elective is defined as work not at the Health Sciences Center, College of Medicine-Tulsa, or in a formally affiliated hospital; nor under the direct supervision of a member of the full-time faculty of the College of Medicine. A statement from the course director of the proposed elective concerning the supervision and grading of student's experience and a detailed course description of the proposed elective are required.. **Course Type:** Clinical

### PATH 9970. Pathology Off-Campus Elective. 120-320 Clock Hours.

Prerequisite: Fourth year standing and approval of the Director of Resident and Student Affairs. A statement from the course director of the proposed elective concerning the supervision and grading of the student's experience and a detailed course description of the proposed elective are required. May be repeated; maximum credit 320 hours. Experience in recognized fields of pathology at geographic locations other than the Tulsa Medical College or Health Sciences Center. **Course Type:** Clinical

### PATH 9980. Special Studies. 1-320 Clock Hours.

May be repeated with change of subject matter. Topics of special nature or of unusual interest to the individual student. **Course Type:** Clinical

## PATH 9990. Special Studies. 1-160 Clock Hours.

A statement from the special studies proctor concerning the supervision and grading of the student's experience and a description of the proposed special study are required. Topics of a special nature or of unusual

interest to the individual student. May be repeated with change of subject matter.

Course Type: Clinical