

# PATHOLOGY (PA)

## PA 502. Medical Terminology: Advanced. 2 Credits.

This course is intended for students enrolled in the pathologists' assistant program. Students study the etymology of medical and surgical terms with an emphasis on the principles of word analysis, construction and evolution. The course includes a review of anatomy and abstraction of current published case studies.

**Prerequisites:** None

**Offered:** Every year, Summer

## PA 505. Forensic Pathology. 2 Credits.

This course introduces the principles of forensic pathology as it pertains to the scope of practice for a pathologists' assistant. Students will apply the concepts learned throughout the course to satisfy NAACLS accreditation standards in forensic pathology and to prepare the student for the ASCP certification/licensure examination upon graduation. This course will review specific types of circumstances in which a forensic autopsy provides the best opportunity for competent investigation.

**Prerequisites:** None

**Offered:** Every year, Summer

## PA 506. Forensic Imaging. 2 Credits.

The course provides an introduction to the principles of diagnostic imaging and its applications in forensics. The advantages and disadvantages of various imaging modalities for the examination of specimens and cadavers are presented as well as radiation safety, x-ray and image production, types of recording media and radiographic exposure. Students will apply the concepts learned throughout the course to navigate and troubleshoot basic radiographic simulation scenarios.

**Prerequisites:** None

**Offered:** Every year, Summer

## PA 511. Human Microscopic Anatomy. 4 Credits.

This course is intended for students enrolled in the pathologists' assistant program. Human anatomy at the light microscopic level is explored through a general and systemic approach using a lecture-lab combination. Students are introduced to primary tissues and their cellular components followed by system (organ) investigation morphologically that uses the light microscope emphasizing pattern recognition as the mechanism employed for tissue identification.

**Prerequisites:** None

**Offered:** Every year, Fall

## PA 512. Human Anatomy. 4 Credits.

This course is intended for students enrolled in the pathologists' assistant program. This course covers dissection of the human body with particular attention to the morphological relationships of individual organ systems. Emphasis is placed on internal anatomy as a major facet of this instruction that is designed for eventual autopsy evisceration and subsequent dissection.

**Prerequisites:** None

**Offered:** Every year, Summer

## PA 512L. Human Anatomy Lab. 0 Credits.

Lab to accompany PA 512.

**Prerequisites:** None

**Offered:** Every year, Summer

## PA 513. Basic Human Pathology I. 3 Credits.

This course is intended for students enrolled in the pathologists' assistant program. This series of lectures utilizes slides of gross and microscopic pathology starting with a general introduction to pathology covering inflammation and neoplasia, and then progressing to pathology by the systems such as cardiovascular, endocrine and gastrointestinal systems.

**Prerequisites:** None

**Offered:** Every year, Fall

## PA 514. Basic Human Pathology II. 3 Credits.

This course is intended for students enrolled in the pathologists' assistant program. This series of lectures utilizes slides of gross and microscopic pathology of specific areas of disease in a systemic approach including such specialty areas as dermatologic, perinatal, pediatric and forensic pathology as well as the genitourinary, musculoskeletal, respiratory and neuropathology systems.

**Prerequisites:** None

**Offered:** Every year, Spring

## PA 515. Human Physiology. 4 Credits.

This course is intended for students enrolled in the pathologists' assistant program. Various aspects of human physiology are examined, with emphasis on the physiologic and biochemical function. The fundamental functional principles for general and systematic organ systems are covered.

**Prerequisites:** None

**Offered:** Every year, Summer

## PA 516. Clinical Pathology. 4 Credits.

This course is intended for students enrolled in the pathologists' assistant program. Clinical relationships to disease are examined, highlighting such topics as hematology, chemistry, toxicology, serology, urinalysis, blood banking and cytology. Basic techniques and theoretical applications from a case history medical approach are emphasized.

**Prerequisites:** None

**Offered:** Every year, Spring

## PA 517. Applied Anatomic Pathology. 4 Credits.

This course is intended for students enrolled in the pathologists' assistant program. Basic principles of clinical history taking, physical examinations and general medical terms and symbols are studied. Emphasis is on autopsy and surgical techniques of evisceration and organ system dissection through lectures, films, slides and practical exposure.

**Prerequisites:** None

**Offered:** Every year, Spring

## PA 520. Autopsy Pathology I. 6 Credits.

This course is only for second-year pathologists' assistant students. This three-semester rotational, practical course on the techniques of autopsy dissection includes summarization of clinical histories and gross autopsy findings. The 12-month rotation involves several different hospitals in both community and university settings.

**Prerequisites:** None

**Offered:** Every year, Summer

## PA 521. Autopsy Pathology II. 6 Credits.

This course is only for second-year pathologists' assistant students. This three-semester rotational, practical course on the techniques of autopsy dissection includes summarization of clinical histories and gross autopsy findings. The 12-month rotation involves several different hospitals in both community and university settings.

**Prerequisites:** None

**Offered:** Every year, Fall

**PA 522. Autopsy Pathology III. 6 Credits.**

This course is only for second-year pathologists' assistant students. This three-semester rotational, practical course on the techniques of autopsy dissection includes summarization of clinical histories and gross autopsy findings. The 12-month rotation involves several different hospitals in both community and university settings.

**Prerequisites:** None

**Offered:** Every year, Spring

**PA 523. Surgical Pathology I. 6 Credits.**

This course is only for second-year pathologists' assistant students. This is a three-semester inclusive practical course in methods of gross tissue description, dissection and preparation, fixation and storage of surgical specimens for light, immuno-fluorescent, immunochemical, frozen and electron microscopy. The 12-month rotation involves several different hospitals in both community and university settings.

**Prerequisites:** None

**Offered:** Every year, Summer

**PA 524. Surgical Pathology II. 6 Credits.**

This course is only for second-year pathologists' assistant students. This is a three-semester inclusive practical course in methods of gross tissue description, dissection and preparation, fixation and storage of surgical specimens for light, immuno-fluorescent, immunochemical, frozen and electron microscopy. The 12-month rotation involves several different hospitals in both community and university settings.

**Prerequisites:** None

**Offered:** Every year, Fall

**PA 525. Surgical Pathology III. 6 Credits.**

This course is only for second-year pathologists' assistant students. This three-semester inclusive practical course covers methods of gross tissue description, dissection and preparation, fixation and storage of surgical specimens for light, immuno-fluorescent, immunochemical, frozen and electron microscopy. The 12-month rotation involves several different hospitals in both community and university settings.

**Prerequisites:** None

**Offered:** Every year, Spring

**PA 526. Biomedical Photography. 4 Credits.**

This course is only for second-year pathologists' assistant students.

This is a team-taught course designed to give the pathologists' assistant student a basic background leading to practical application of photographic techniques used in the anatomic pathology laboratory. It also includes an introduction to the principles of imaging radiography.

The course is divided into three parts over two summer-school semesters: basic photographic principles and technique; the theoretical and practical aspects of photomacrography and photomicrography as they are applied to anatomic specimens and imaging radiology.

**Prerequisites:** None

**Offered:** Every year, Summer

**PA 535. Disease Mechanisms. 4 Credits.**

This course is only for second-year pathologists' assistant students. This course investigates how the normal physiology of the human body is altered in disease states. The mechanisms by which diseases become established, cause damage and alter organ system function are established. Natural body responses and therapeutic measures are examined for their mode of action, side effects and after affects.

**Prerequisites:** None

**Offered:** Every year, Fall