Biomedical Studies (PBMS)

Course information contained within the Bulletin is accurate at the time of publication in June 2025 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

PBMS P100. Histology. 6.25 Credit Hours.
Repeatability: This course may not be repeated for additional credits.

PBMS P102. General Anatomy. 7 Credit Hours.
Repeatability: This course may not be repeated for additional credits.

PBMS P103. Lower Extremity Anatomy. 7.7 Credit Hours.
Repeatability: This course may not be repeated for additional credits.

PBMS P104. Physiology II. 2.5 Credit Hours.
Physiology presents a concise description of cell processes and the incorporation of these processes into descriptions of how the nervous system functions. Cell processes include lectures on cell transport systems, osmosis, bioelectric potential development as well as detailed descriptions of how excitable tissues (muscle and nerve) function. These lectures provide fundamental knowledge that is then applied to lectures concerning the integrated functions of the body. In this course, the integrated functions are presented utilizing a basic computer paradigm. This includes functional descriptions of the input from the sensory system (pressure, vision, etc.) to processing by the central nervous system (spinal cord, cerebellum, motor cortex, etc.) and finally the output to muscle effectors. Included are brief descriptions of certain pathophysiologic mechanisms (ex. athetosis, Parkinson's and others) that are useful in describing where normal Physiology can be modified by lesions. All of this gives the student a comprehensive understanding of the Physiology of the body. Such an understanding is, in turn, foundation knowledge upon which case presentations of pathologies can be comprehended by the students.

Repeatability: This course may not be repeated for additional credits.

PBMS P105. Neuroanatomy. 2 Credit Hours.
The course involves the study of the structure and function of the central nervous system through an understanding of the principal neural pathways involved in the transmission of information. These pathways include those mediating motor and sensory functions, as well as those serving higher cortical functions such as cognition. The neuroanatomic basis of the neurological examination of a patient and the implications of damage to these pathways will be emphasized. The course will be presented primarily through lectures. In addition there will be one lab session and several sessions for the discussion of case studies.

Repeatability: This course may not be repeated for additional credits.

PBMS P109. Biomechanics. 2 Credit Hours.
The course reviews skeletal and muscular anatomy and discusses those processes necessary to allow posture and locomotion. The students will identify skeletal features through palpation and use these references for segment measurement and evaluation of joint range and quality of motion. Instrumented measurements will supplement clinical measurements. The course provides normal joint ranges of motion in the lower extremities in mature and pediatric individuals; introduces single plane and triplane motions in the open and closed kinetic chains; describes muscle action with respect to joint axes; prepares the student for clinical biomechanical examination and gait analysis; provides a basis for understanding biomechanical pathology; introduces terminology describing segmental deviations from normal structure and function; introduces the student to biomechanical evaluation of diagnostic imaging; and compares clinical measurement with radiological and instrumented findings for an individual.

Repeatability: This course may not be repeated for additional credits.

PBMS P110. Biochemistry. 6 Credit Hours.
Repeatability: This course may not be repeated for additional credits.

PBMS P111. Physiology. 5 Credit Hours.
Repeatability: This course may not be repeated for additional credits.

PBMS P120. Microbiology. 6.8 Credit Hours.
The etiology, control, immunology, and pathogenesis of infectious disease related to medical bacteriology, virology, mycology and parasitology. An understanding of the principles of Microbiology and Immunology. A knowledge of microorganisms, their identification and relationship to disease with an emphasis on those microbes of particular interest to the practicing podiatrist. The maintenance of a sanitary environment with an understanding of sources of infection, contagion, and practice of microbial control. A well-rounded scientific approach to the infectious problems of the patient with an appreciation of the contributing medical disciplines. An epidemiological awareness of the responsibility of the podiatrist to the patient. An understanding of microbiologic clinical laboratory services, their reporting systems and their value to clinical practice.

Repeatability: This course may not be repeated for additional credits.

PBMS P201. Advanced Dissection. 0 Credit Hours.
Repeatability: This course may not be repeated for additional credits.

PBMS P210. Pharmacology. 5.25 Credit Hours.
Repeatability: This course may not be repeated for additional credits.

PBMS P220. Microbiology. 13 Credit Hours.
Repeatability: This course may not be repeated for additional credits.

PBMS P221. Pathology. 9 Credit Hours.
Repeatability: This course may not be repeated for additional credits.

PBMS P222. Pathophysiology. 3 Credit Hours.
Pathophysiology is the integrated study of the basic medical sciences. Usage of case studies and clinical vignettes taught in a comprehensive medical team approach will serve to help students better understand basic tenants of the medical sciences which will then help them achieve greater success on boards, rotations and clinical practice in the future.

Repeatability: This course may not be repeated for additional credits.

PBMS P301. Advanced Dissection. 0 Credit Hours.
Repeatability: This course may not be repeated for additional credits.

PBMS P401. Advanced Dissection. 0 Credit Hours.
Repeatability: This course may not be repeated for additional credits.

PBMS P504. Lower Extremity Anatomy. 1.5 Credit Hour.
Repeatability: This course may not be repeated for additional credits.