

PRECLINICAL SCIENCES (PCS)

PCS 80001 COMPREHENSIVE BASIC SCIENCE I 1 Credit Hour

This course will be required for all Pathway I students. Pathway I students are defined as students who fail APMLE Part I on the first attempt and are preparing to take it for the second time. Students who do not take APMLE Part I on the first attempt will be also be required to take this course.

Prerequisite: Student must be enrolled in the Podiatric Medicine program.

Schedule Type: Lecture

Contact Hours: 1 lecture

Grade Mode: Satisfactory/Unsatisfactory

PCS 80002 COMPREHENSIVE BASIC SCIENCE II 5 Credit Hours

This course will be required for all Pathway II students. Pathway II students are defined as students who fail APMLE Part I on the first and second attempts and are preparing to take it for the third and final time. Eligible students who do not sit for APMLE Part I the first time offered and who fail on their first attempt will be required to take this course as well.

Prerequisite: Student must be enrolled in the Podiatric Medicine program.

Schedule Type: Lecture

Contact Hours: 5 other

Grade Mode: Satisfactory/Unsatisfactory

PCS 80109 HUMAN ANATOMY 6 Credit Hours

The macroscopic anatomy of the upper limb, thorax, abdomen, head and neck, pelvis and perineum of the human body is described, utilizing audiovisual teaching aids and full cadaver dissection. The course is taught using a regional approach, with emphasis on structural and functional relationships. The laboratory instruction includes cadaver dissection supplemented with anatomical prosections, as well as cross-sectional anatomy and computerized educational material.

Prerequisite: Students must be enrolled in the Podiatric Medicine program in order to register for this course.

Schedule Type: Laboratory, Lecture, Combined Lecture and Lab

Contact Hours: 4 lecture, 4 lab

Grade Mode: Standard Letter

PCS 80110 EMBRYOLOGY 2 Credit Hours

This course will cover the major events and processes involved in normal and abnormal embryologic development of the major body organs and systems.

Prerequisite: Students must be enrolled in the Podiatric Medicine program in order to register for this course.

Schedule Type: Lecture

Contact Hours: 2 lecture

Grade Mode: Standard Letter

PCS 80112 CELL AND TISSUE 5 Credit Hours

Histology is the study of the microscopic organization of the human body. Reciprocal relationships between normal structural features and their functions are emphasized. Macromolecules, organelles, cells, fundamental body tissues and organs are compared and contrasted. Light microscopic preparations are examined in laboratories, which are closely correlated with lecture topics.

Prerequisite: Student must be enrolled in the podiatric medicine program.

Schedule Type: Laboratory, Lecture

Contact Hours: 3 lecture, 1 lab, 1 other

Grade Mode: Standard Letter

PCS 80113 STAYING ALIVE 5 Credit Hours

The study of the physical and chemical properties of the major constituents of cells and body fluids. This includes structures, functions and biochemical mechanisms involved in the biosynthesis, utilization and degradation of amino acids, carbohydrates, lipids, proteins and nucleic acids. Also included are enzyme kinetics, bioenergetics, cellular communication, nutrition and biochemistry of specialized tissues and fluids.

Prerequisite: Student must be enrolled in the podiatric medicine program.

Schedule Type: Lecture

Contact Hours: 3 lecture, .5 lab, 1.5 other

Grade Mode: Standard Letter

PCS 80118 MEDICAL GENETICS 2 Credit Hours

This course provides basic principles of human genetics dealing with genetic variations and anomalies that impact medical practice. Molecular genetics, cytogenetics, genomics, and population genetics will be reviewed.

Prerequisite: Student must be enrolled in the podiatric medicine program.

Schedule Type: Lecture

Contact Hours: 2 lecture

Grade Mode: Standard Letter

PCS 80119 HUMAN ANATOMY AND EMBRYOLOGY 8 Credit Hours

The human upper limb, head and neck, thoracic, abdominal and pelvic anatomy is explored through lecture, audiovisual aids and cadaver dissection. The material is presented in a regional approach, with emphasis on structural and functional relationships, and is correlated with cadaver dissection. In addition, early events in human embryology are presented and discussed followed by coverage of regional and system-based events during embryological and fetal development. Anatomical and embryological topics are correlated throughout the course.

Prerequisite: Student must be enrolled in the podiatric medicine program.

Schedule Type: Combined Lecture and Lab

Contact Hours: 6 lecture, 4 lab

Grade Mode: Standard Letter

PCS 80121 NEUROMUSCULAR SYSTEMS 5 Credit Hours

Neuromuscular Systems covers the microanatomy, structures, pathways, connections, biochemistry and physiology of the nervous and muscular (both skeletal and smooth) systems. Students must be first year podiatric students taking Spring semester courses. Students must be first year podiatric students taking Spring semester courses.

Prerequisite: Student must be enrolled in the podiatric medicine program.

Schedule Type: Lecture

Contact Hours: 5 lecture

Grade Mode: Standard Letter

PCS 80122 CARDIOVASCULAR SYSTEM 3 Credit Hours

Cardiovascular System covers the microanatomy, structures, biochemistry and physiology of the heart, blood vascular and lymphatic systems. Students must be first year podiatric students taking Spring semester courses.

Prerequisite: Student must be enrolled in the Podiatric Medicine program.

Schedule Type: Lecture

Contact Hours: 3 lecture

Grade Mode: Standard Letter

PCS 80123 RENAL AND RESPIRATORY SYSTEMS 3 Credit Hours

Renal and Respiratory Systems covers the microanatomy, structures, pathways, connections, biochemistry and physiology of the renal and respiratory systems. Students must be first year podiatric students taking Spring semester courses. Pre/corequisites: None Corequisites: None

Prerequisite: Student must be enrolled in the Podiatric Medicine program.

Schedule Type: Lecture

Contact Hours: 45 lecture, 0 lab, 0 other

Grade Mode: Standard Letter

PCS 80124 LOWER EXTREMITY ANATOMY 8 Credit Hours

Lower extremity anatomy presents the detailed macroscopic anatomy of the lower limb. The course is augmented with radiographs, MRI, surface anatomy and cross sectional studies. The course includes an introduction to basic concepts of podiatric medicine, surgery and biomechanics. Laboratory instruction includes a detailed dissection of the lower limb, supplemented with computerized educational materials and study of natural bone specimens.

Prerequisite: Student must be enrolled in the podiatric medicine program.

Schedule Type: Laboratory, Lecture

Contact Hours: 4 lecture, 4 lab

Grade Mode: Standard Letter

PCS 80128 MEDICAL MICROBIO/IMMUNOLOGY 6 Credit Hours

This course will introduce the student to the basic concepts, characteristics and techniques used in the study of the clinically significant microbic groups: viruses, bacteria, fungi, and protozoa. The structure, metabolism, genetics, control and laboratory techniques of each microbic group will be described. The roles and outcomes of these organisms in producing manifestations of human infection and disease will be investigated. This course will also introduce the student to the molecular, cellular and organismal mechanisms responsible for the human immune response system. Laboratory will provide hands on experience in staining, cultivation, identification, sensitivity testing, and immunologic techniques.

Prerequisite: Student must be enrolled in the podiatric medicine program.

Schedule Type: Combined Lecture and Lab

Contact Hours: 5 lecture, 1 lab

Grade Mode: Standard Letter

PCS 80218 HUMAN SYSTEMS PATHOLOGY I 8 Credit Hours

The study of disease with emphasis on epidemiology, pathogenesis, natural history, morphologic appearance and relationship to clinical manifestation. Emphasis is placed on basic cellular pathologic processes (injury, inflammation and repair, neoplasia), and description of diseases organized by organ system. An introduction to the concepts of clinical decision making through the use of case studies and current clinical literature will be emphasized.

Prerequisite: Student must be enrolled in the podiatric medicine program.

Schedule Type: Lecture

Contact Hours: 8 lecture

Grade Mode: Standard Letter

PCS 80219 PHARMACOLOGY AND THERAPEUTICS I 4 Credit Hours

Historically, the clinician was responsible for information about the sources, physical and chemical properties, compounding and dispensing of drugs. Today the practitioner's responsibility requires the rational clinical use of therapeutic agents for the prevention, diagnosis, and treatment of disease based on an understanding of pharmacological principles. This course is designed to prepare practitioners to prescribe for maximum benefit and to recognize the clinical ramifications of concomitant drug therapy.

Prerequisite: Student must be enrolled in the podiatric medicine program.

Schedule Type: Lecture

Contact Hours: 4 lecture

Grade Mode: Standard Letter

PCS 80228 HUMAN SYSTEMS PATHOLOGY II 8 Credit Hours

The study of disease with emphasis on epidemiology, pathogenesis, natural history, morphologic appearance and relationship to clinical manifestation. Emphasis is placed on basic cellular pathologic processes (injury, inflammation and repair, neoplasia), and description of diseases organized by organ system. An introduction to the concepts of clinical decision making through the use of case studies and current clinical literature will be emphasized.

Prerequisite: Student must be enrolled in the podiatric medicine program.

Schedule Type: Lecture

Contact Hours: 8 lecture

Grade Mode: Standard Letter

PCS 80229 PHARMACOLOGY AND THERAPEUTICS II 4 Credit Hours

Historically, the clinician was responsible for information about the sources, physical and chemical properties, compounding and dispensing of drugs. Today the practitioner's responsibility requires the rational clinical use of therapeutic agents for the prevention, diagnosis, and treatment of disease based on an understanding of pharmacological principles. This course is designed to prepare practitioners to prescribe for maximum benefit and to recognize the clinical ramifications of concomitant drug therapy.

Prerequisite: Student must be enrolled in the podiatric medicine program.

Schedule Type: Lecture

Contact Hours: 4 lecture

Grade Mode: Standard Letter