MDCJ 502. Pathophysiology and Applied Physical Diagnosis. 11 Units.
Supports the organ system curriculum in the second year. Uses mechanisms of disease to bridge the basic science and clinical curriculum by requiring students to think critically while applying basic science knowledge to solve clinical problems. Introduces students to the pathophysiologic principles underlying mechanisms of disease; and emphasizes the application of pathophysiologic principles to a variety of new situations that require problem solving and synthesis in a clinical context—a process accomplished through formal didactic sessions, as well as case-based, simulation, real patient, and self-directed learning activities designed to integrate basic science knowledge into the clinical encounter and promote the development of clinical skills and professionalism.

MDCJ 538. Medical Neuroscience. 3.5 Units.
Provides a broad-based foundation in neuroscience upon which students can build throughout the remainder of their medical training and professional career. Supports the organ system curriculum in the freshman year. Teaches the basic normal neuroanatomy and neurophysiology of the human central and peripheral nervous system. Uses the neurologic examination to illustrate how the central and peripheral nervous systems can be evaluated. Students learn how to accurately localize lesions of the central and peripheral nervous systems, as well as the technologies that can diagnose neurologic condition—including brain magnetic resonance imaging (MRI), computerized tomography (CT), electromyography (EMG), electroencephalogram (EEG), and lumbar puncture. Incorporates formal lectures, brain dissection laboratories, small-group case studies, and online learning activities.
MDCJ 539. Diseases of Neuroscience. 4 Units.
Supports the organ system curriculum in the second year. Builds on the first-year neuroscience course to transform the basic building blocks of neuroanatomy and neurophysiology into tools that apply to “real” patients with neurologic disease. Students systematically apply the integration of neuroanatomy, neurophysiology, and the neurologic examination to patients with neurologic disease in the following broad categories: muscle disease and myopathy; neuromuscular junction disorders; peripheral neuropathy, electromyography (EMG), and nerve conduction studies (NCS); brachial plexopathy and radiculopathy; spinal cord disorders, including motor neuron disease; multiple sclerosis and demyelinating diseases; brain stem syndromes; cerebrovascular disease; movement disorders; dementia; headache; central nervous system trauma; tumors of the central nervous system (CNS); epilepsy and electroencephalography (EEG); coma and encephalopathy; neurology and neuropathology of medical disease; CNS infections; and sleep disorders. Utilizes formal lectures, audience response interactive learning, small-group case studies, interactive lecture reinforcement, team-based learning, and online learning activities. Integrates clinical neurology, neuropathology, and neuropharmacology throughout.

MDCJ 560. Basis of Medical Genetics. 2 Units.
Supports the organ system curriculum in the first year of medical education. Lays the basic foundations in genetics and molecular biology, including mechanisms for genetic information and its flow in eukaryotic cells. Introduces students to the causes of genetic disorders and familial disease, including inherited congenital disorders; as well as the genetic components of common disorders. Combines teaching and learning methodologies—including, didactic sessions, interactive class case presentations with real patients, and team-based learning sessions.

MDCJ 599. Medicine Conjoint Directed Study. 1-18 Units.
Individual arrangements for students to study under the guidance of a program faculty member. May include reading, literature review, lectures or other special projects. Minimum of thirty hours required for each unit of credit. Does not fulfill requirements towards the M.D. degree.

MDCJ 821. Preventive Medicine and Population Health. 1.5-6 Units.
Introduces clinical preventive medicine, quality improvement and patient safety, and care of the underserved in clinic and public health settings. Introduces students to various allied health professions and complementary and alternative medicine. Utilizes clinical teaching, online/independent learning, lectures, and other group-learning experiences—including simulation—to enhance the knowledge and attitudes important to public health and preventive medicine; as well as to core skills, including utilizing motivational interviewing to foster behavioral change. Teaches important quality improvement knowledge and attitudes. Requires students to work with fellow students and clinical leaders to conduct and report on a quality improvement project.

MDCJ 891. Whole Person Care. 1.5-30 Units.
Offers fourth-year medical students the opportunity to explore various aspects of whole person care, film and medicine, law and medicine, tropical medicine, and patient safety.