

MD courses eligible to transfer towards the PhD

MD1 5001 Human Body Foundations I (Up to 10 credits)

Human Body Foundations I is the first of a 3-part course series in the basic sciences that engages medical students with knowledge of the normal structure and function of the human body. Part I emphasizes fundamental principles in biochemistry, cell biology, embryology, histology, genetics, physiology, and pharmacology, and introduces students to the anatomical investigation of tissues and organs through full-body cadaver dissection beginning with the Musculoskeletal System.

MD1 5002 Human Body Foundations II (Up to 10 credits)

Human Body Foundations II is the second of a 3-part course series in the basic sciences that engages medical students with knowledge of the normal structure and function of the human body. Part II focuses on three organ systems of the body: Cardiovascular/Respiratory, Renal/Urinary, and Gastrointestinal, emphasizing fundamental principles of physiology, histology, biochemistry, pharmacology, genetics, and embryology, as well as anatomical study through full-body cadaver dissection of the visceral systems.

MD1 5003 Human Body Foundations III (Up to 10 credits)

Human Body Foundations III is the last of a 3-part course series in the basic sciences that engages medical students with knowledge of the normal structure and function of the human body. Part III focuses on the Reproductive & Endocrine Systems and the Central Nervous System and emphasizes fundamental principles of neuroscience, physiology, histology, embryology, genetics, biochemistry, and pharmacology. The sequence of full-body cadaver dissection is brought to a close with the anatomical investigation of pelvic and head & neck regions.

MD1 5541 Research Elective 1A (Up to 2 credits)

Medical research goes far beyond the performance of experiments and collection of data. Research also involves the ability to critically read pertinent scientific literature and to develop hypotheses based on that reading. In addition, a researcher must design experiments to test hypotheses, analyze and critically evaluate resultant data, interpret results, and clearly present the findings. This course is designed to facilitate selection of a research mentor and to begin development of skills necessary to perform research. In this course, students will specifically learn to: 1) interact effectively and professionally with potential mentors, 2) critically read, evaluate, and discuss scientific literature at a level appropriate for a beginning research student, and 3) work professionally and efficiently as part of a team.

MD1 5542 Research Elective 1B (Up to 3 credits)

Medical research goes far beyond the performance of experiments and collection of data. Research also involves the ability to critically read pertinent scientific literature and to develop hypotheses based on that reading. In addition, a researcher must design experiments to test hypotheses, analyze and critically evaluate resultant data, interpret results, and clearly present the findings. This course is designed to facilitate selection of a research mentor and to begin development of skills necessary to perform research. In

this course, students will specifically learn to: 1) interact effectively and professionally with potential mentors, 2) critically read, evaluate, and discuss scientific literature at a level appropriate for a beginning research student, and 3) work professionally and efficiently as part of a team.

MD2 6001 Human Disease Foundations I (Up to 10 credits)

The overall goal of the Human Disease Foundations series is to engage second-year medical students in learning the key concepts and foundational principles related to the etiology, pathogenesis, pathology, pathophysiology, clinical manifestations, basic principles of diagnosis, and treatment of disease processes. These courses emphasize foundational knowledge in pathophysiology, microbiology, immunology, genetics, and pharmacology. Human Disease Foundations-I, covers the foundational aspects of the pathological and pathophysiological mechanisms of disease, clinical genetics, immunology, microbiology/infectious disease, and the musculoskeletal, peripheral nervous and integumentary systems.

MD2 6002 Human Disease Foundations II (Up to 10 credits).

The overall goal of the Human Disease Foundations series is to engage second-year medical students in learning the key concepts and foundational principles related to the etiology, pathogenesis, pathology, pathophysiology, clinical manifestations, basic principles of diagnosis, and treatment of disease processes. These courses emphasize foundational knowledge in pathophysiology, microbiology, immunology, genetics, and pharmacology. Human Disease Foundations-II, covers the most important aspects of the pathology and pathophysiology mechanisms of diseases affecting the cardiopulmonary, gastrointestinal, and urinary systems.

MD2 6003 Human Disease Foundations III (Up to 10 credits)

Human Disease Foundations-III engages students in learning the key concepts and foundational principles related to etiology, pathology, pathophysiology, recognition of clinical presentations, basic principles of diagnosis, and treatment of disease processes which affect the hematologic/lymphatic, endocrine, reproductive, and central nervous systems. This course emphasizes foundational knowledge in pathophysiology, microbiology, immunology, genetics, pharmacology, neurology and psychiatry.

MD2 6541 Research Elective 2A (Up to 2 credits)

This course is designed to further develop the skills learned in the M1 electives and to enhance a student's hands-on research skills by providing opportunities to perform research under the guidance of an individual mentor. Students will specifically learn to: 1) apply their knowledge of research skills to perform scientific research in a laboratory under the guidance of a mentor, 2) critically read, evaluate, and discuss scientific literature at a level appropriate for an advanced research student, 3) interact effectively and professionally with a chosen mentor, and 4) work professionally and efficiently as part of a team of peers and other researchers.

MD2 6542 Research Elective 2B (Up to 3 credits)

In the preceding M2 Research Elective 2A course, students further developed the research skills they had learned in the M1 electives and enhanced their hands-on research skills by performing research under the guidance of their mentor. This course is designed to enhance and sharpen the skills learned in the previous research electives. Students will specifically learn to: 1) apply their knowledge of research skills to perform scientific research in a laboratory under the guidance of a mentor, 2) apply their knowledge of research and presentation skills to prepare and professionally present a research presentation, 3) critically read, evaluate, and discuss scientific literature at a level appropriate for an advanced research student, 4) critically listen to and evaluate a scientific presentation, 5) interact effectively and professionally with a chosen mentor, and 6) work professionally and efficiently as part of a team of peers and other researchers.