

BM - Biomedical Sciences (Medical Masters)

BM 501 Foundations of Disease (10 Credit Hours)

Foundations of Disease teaches foundational knowledge that provides the fundamental building blocks necessary to progress to subsequent organ system modules within the curriculum. This course covers molecular cell biology and biochemistry, the interaction of cells with their environment, including the structure and function of tissues, electrical activity in cellular function, autonomic physiology, and the basic principles of pharmacology.

BM 502 Introduction to Organ Systems (8 Credit Hours)

Introduction to Organ Systems represents the transition to organ system courses in the Care Forward Curriculum. Students will explore the histology, immunology, microbiology, pathology, physiology/pathophysiology, and pharmacology of the following – heme, musculoskeletal (muscle/bone), skin, and gastrointestinal organ systems. Integration is achieved across all major medical basic science disciplines, from normal anatomic and physiologic functions to abnormal disease states to relevant pharmacotherapy.

BM 503 Hormones (4 Credit Hours)

The Hormones course will enable students to acquire and apply knowledge of internal homeostasis/metabolism from basic science to clinical situations. Students will review the embryological and anatomical development of the endocrine system; they will acquire and apply physiological, pharmacological, and pathological knowledge necessary to prevent, evaluate, and treat metabolic, and endocrine disorders.

BM 519 Medical School Preparation 2.0 (3 Credit Hours)

This course will explore non-academic aspects of preparing for admission to and success in medical school. The students will develop communication skills by engaging in team-based activities and mock interviews. They will be introduced to clinical skills by participating in standardized patient encounters. Group activities will help students develop their professionalism and professional identity. Guest physician lecturers will enhance the students' knowledge of the practice of medicine.

BM 524 Medical School Preparation 1.0 (1 Credit Hour)

Medical School Prep will discuss the expectations of a medical student/physician, on overview of community engaged learning opportunities, and application preparation guidance. The 15 AAMC Core Competencies for medical school students will be reviewed, why they are important in a future career as a physician, and how one might display them through application materials. Students will also be instructed on how to participate in Community Engaged Learning, and an average of 40 hours each semester of engagement will be required. Finally, the MD and DO medical school applications will be reviewed, including personal statements and topics such as how to decide where to apply and budgeting for the application cycle will be discussed. Twice a semester reflections will be due covering topics such as characteristics of a good medical student/physician and resilience and wellness.

BM 525 Medical School Preparation 1.5 (1 Credit Hour)

Medical School Prep will discuss the expectations of a medical student/physician, on overview of community engaged learning opportunities, and application preparation guidance. The 15 AAMC Core Competencies for medical school students will be reviewed, why they are important in a future career as a physician, and how one might display them through application materials. Students will also be instructed on how to participate in Community Engaged Learning, and an average of 40 hours each semester of engagement will be required. Finally, the MD and DO medical school applications will be reviewed, including personal statements and topics such as how to decide where to apply and budgeting for the application cycle will be discussed. Twice a semester reflections will be due covering topics such as characteristics of a good medical student/physician and resilience and wellness.

BM 530 Foundational Science II (8 Credit Hours)

Foundational Science II is a 17-week module divided into four blocks. In the first block, molecular and cell biology will be reviewed. In block two, metabolism and cell signaling will be covered. In the third block, the interaction of cells with their environment will be explored, including the structure and function of tissues, electrical activity in cellular function, autonomic physiology and the basic principles of biostatistics and pharmacology will be introduced. In the final block of the module, a brief introduction to microorganisms will be provided and then learning the foundations of immunology. Together, the module will provide the foundational building blocks necessary to progress to subsequent modules in the curriculum.

BM 534 MCAT Preparation (4 Credit Hours)

The students will take an MCAT preparation course taught by Kaplan Test Prep during the spring of year 1. The faculty advisors and academic counselors will monitor students' progress in the course.

BM 536 Human Structure (7 Credit Hours)

The Human Structure course provides a comprehensive overview of clinically relevant human anatomy through a case-based, collaborative approach. The module describes the human body's form, structure, function, and development by recognizing typical variations and using these variations to describe and explain clinically relevant abnormalities. Students utilize critical thinking skills and then learn to integrate the anatomical sciences, and medical imaging while engaging with content that strongly emphasizes cultural humility, professionalism, and ethical behavior.