

# MEDICAL CURRICULUM (MDC)

## **MDC 710 Elements of Medicine 9 Credit hours**

Elements of Medicine introduces the student to the fundamental concepts necessary to understand the structure and function of the human body at a molecular level.

**Grade Mode:** Normal Grading Mode

## **MDC 711 Structure and Function I 5 Credit hours**

The Structure and Function I block introduces students to the organization of the human body at a gross and microscopic level while integrating the cellular processes that underlie the normal physiology of the musculoskeletal system and the integument.

**Grade Mode:** Normal Grading Mode

## **MDC 712 Structure and Function II 8 Credit hours**

Nervous System and Behavior is an integrated course for first year medical students. Students will understand how internal (neurobiological) and external (family, community, and culture) processes determine human experience and behavior, and to introduce students to the diseases and disease processes which adversely affect the nervous system and behavior.

**Grade Mode:** Normal Grading Mode

## **MDC 713 Structure and Function III 6 Credit hours**

Structure and Function III provides first year medical students with a solid foundation in normal human cardiovascular, pulmonary and renal structure and function.

**Grade Mode:** Normal Grading Mode

## **MDC 714 Structure and Function IV 6 Credit hours**

Structure and Function IV provides first year medical students with a solid foundation in normal human gastrointestinal, endocrine and reproductive structure and function.

**Grade Mode:** Normal Grading Mode

## **MDC 750 Principles of Disease 7 Credit hours**

Principles of Disease is an integrated introduction to human disease and treatment based on core concepts in microbiology, immunology, pharmacology, genetics, and pathology.

**Grade Mode:** Pass/Fail Grading Mode

## **MDC 751 Disease and Therapeutics I 6 Credit hours**

Disease and Therapeutics I introduces the student to the fundamental concepts necessary to understand disease processes, diagnostics and therapeutic options for diseases of the Musculoskeletal, Dermatologic and Hematopoietic systems.

**Grade Mode:** Pass/Fail Grading Mode

## **MDC 752 Disease and Therapeutics II 7 Credit hours**

Disease and Therapeutics II introduces the student to the fundamental concepts necessary to understand disease processes, diagnostics and therapeutic options for diseases of the nervous system.

**Grade Mode:** Pass/Fail Grading Mode

## **MDC 753 Disease and Therapeutics III 8 Credit hours**

Disease and Therapeutics III introduces the student to the fundamental concepts necessary to understand disease processes, diagnostics and therapeutic options for diseases of the cardiovascular, pulmonary and renal systems.

**Grade Mode:** Pass/Fail Grading Mode

## **MDC 754 Disease and Therapeutics IV 9 Credit hours**

Disease and Therapeutics IV introduces the student to the fundamental concepts necessary to understand disease processes, diagnostics and therapeutic options for diseases of the Gastrointestinal, Genitourinary and Endocrine systems.

**Grade Mode:** Pass/Fail Grading Mode

## **MDC 800 Physicians in Practice 1-18 Credit hours**

This course will focus primarily on the non-medical knowledge competencies of the curriculum. This will include professionalism, systems based practice, practice-based learning and improvement, interpersonal and communication skills, and clinical and translational sciences.

**Grade Mode:** Pass/Fail Grading Mode

## **MDC 801 Mol and Cell Foundations 1-18 Credit hours**

This course will provide the molecular and cellular background for understanding human health and disease, as well as the basis for understanding human interactions with microorganisms, an introduction to pharmacology, and a comprehensive introduction to host defenses. Through the content covered the course will introduce students to a core set of medical knowledge required to understand, implement, and explain clinical decisions. Skills building will include teamwork, professionalism, life-long learning, and curation of appropriate information sources.

**Grade Mode:** Pass/Fail Grading Mode

## **MDC 802 Hematology and Oncology 1-18 Credit hours**

The course addresses various competencies including medical knowledge, patient care, and professionalism.

**Grade Mode:** Pass/Fail Grading Mode

## **MDC 803 Patient Care & Clinical Skills 1-18 Credit hours**

This course will help students master the skills necessary for obtaining a thorough history and performing a complete physical exam. This course will instruct and assess on all components necessary to provide clinical care.

**Grade Mode:** Pass/Fail Grading Mode

## **MDC 804 The Neurological Network 9 Credit hours**

This course will integrate the basic science and clinical information related to musculoskeletal, neurological, and psychiatric disorders. The course will focus primarily on the medical knowledge learning objectives, but will also include practice based learning, professionalism, and interpersonal and communication skills objectives.

**Grade Mode:** Pass/Fail Grading Mode

## **MDC 805 Nutrition & Gastroenterology 1-18 Credit hours**

The goal of this course is to provide students with foundations of determinants of health and disease of the gastrointestinal system and explore the effects of nutrition on human health and disease. True vertical integration of relevant foundational science disciplines are leveraged to highlight the interplay of key concepts in the pathophysiology and management of diseases of the digestive system. Variety of active and self-directed learning pedagogies, including team-based learning, clinical correlates, small group activities, and independent study of clinical cases complement the didactic material and help the student apply the material to medical problem solving. The course is centered on patient care and integrates with the longitudinal course "Patient Care and Clinical Skills" to enhance the understanding and application of foundational sciences to the practice of medicine.

**Grade Mode:** Pass/Fail Grading Mode

**MDC 806 Patient Care & Clin Skills II 1-18 Credit hours**

A continuation of the first year course, this course will help students master the skills necessary for obtaining a thorough history and performing a complete physical exam. This course will instruct and assess on all components necessary to provide clinical care.

**Grade Mode:** Pass/Fail Grading Mode

**MDC 807 Cardio, Renal, & Res Sys 1-18 Credit hours**

This course will help students master the foundational concepts and clinical correlations for diseases of the three vital organ systems. The course employs integrative approach to build foundations for understanding determinates of health and disease related to these organ systems. All relevant foundational disciplines, including anatomy, physiology, pathology, pharmacology, and radiology will be covered in this course.

**Grade Mode:** Pass/Fail Grading Mode

**MDC 808 Reproduction and Endocrinology 1-18 Credit hours**

The goal of this course is to provide students with foundations of determinants of health and disease of the endocrine and the reproductive system. True vertical integration of relevant foundational science disciplines are leveraged to highlight the interplay of key concepts in the pathophysiology and management of diseases of these. Variety of active and self-directed learning pedagogies, including team-based learning, clinical correlates, small group activities, and independent study of clinical cases complement the didactic material and help the student apply the material to medical problem solving.

**Grade Mode:** Pass/Fail Grading Mode

**MDC 809 Comp Basic Science Exam 1-18 Credit hours**

This course includes students independent study and preparation for the Comprehensive Basic Science Examination. Students must demonstrate their overall knowledge of the foundational sciences that are critical to the practice of medicine by earning a passing grade on the CBSE.

**Grade Mode:** Pass/Fail Grading Mode

**MDC 810 Pre-Clerkship 1-6 Credit hours**

This course includes the development and implementation of an independent study plan in preparation for repeat of M2.

**Grade Mode:** Pass/Fail Grading Mode

**MDC 811 Microbiology and Host Defense 6 Credit hours**

This course will introduce students to the foundational knowledge and skills they will use throughout their medical training. The content areas will include microbiology, immunology, with an introduction to core concepts in pharmacology and pathology. Students will apply this knowledge to understand human health and to recognize and manage human health conditions.

**Grade Mode:** Pass/Fail Grading Mode

**MDC 812 Prin and Prac of Clin Research 1-18 Credit hours**

Students will learn about the following areas of clinical research: biostatistical and epidemiological methods, study design, protocol development, clinical trial implementation, data monitoring and auditing, quality assurance, and ethical and legal issues.

**Grade Mode:** Pass/Fail Grading Mode

**MDC 813 Prof Identity Development 1-18 Credit hours**

Provide entering JCESOM first year students with foundations of professionalism, ethics, identity development and commitment to compassionate care to all in a variety of health care settings. Didactic and small group sessions, Team-Based Learning (TBL), and Self-Directed Learning (SDL) will be used to teach students these core concepts.

**Grade Mode:** Pass/Fail Grading Mode

**MDC 814 The Musculoskeletal System 1-18 Credit hours**

The course will address foundational knowledge in key areas medicine, and will address Institutional Objectives, including medical knowledge, interpersonal and communication skills, professionalism, and critical thinking and problem solving.

**Grade Mode:** Pass/Fail Grading Mode

**MDC 815 Med Student Summer Research 1-18 Credit hours**

This elective course aims to provide pre-clerkship medical students with an opportunity to conduct research under the mentorship of a basic science or clinical faculty member and to learn research methods.

**Grade Mode:** Pass/Fail Grading Mode