MEDICINE (MED)

MED 0100 - Molecular Foundations in Medicine
1-4 Credits (Repeatable for credit)
Molecular Foundations in Medicine (MFM) reviews the fundamental underlying concepts of life - cell and molecular biology, biochemistry and genetics. This course has one primary aim â€“ to provide the student with the fundamental knowledge needed to conceptualize and apply complex pathophysiologic and pharmacologic principles encountered in later courses throughout the first and second year curricula. In this course, students will learn by a combination of self-directed learning and in class learning sessions including lectures, team based learning (TBL), peer instruction (Pi), and post exam reviews. This course is divided into three weeks: Week 1 will review essential molecular biology and genetics. Week 2 will focus on a review of biochemistry fundamentals, vitamins, and intermediary metabolism. Week 3 will wrap up with a focus on lipids transport and signaling.

MED 0101 - Clinical Interviewing
1-15 Credits (Repeatable for credit)
In Clinical Interviewing, students will achieve the following goals: - Demonstrate effective patient interviewing skills - Adapt the clinical interview based on the impact of the social determinants of health - Engage in activities that promote professionalism and student wellness. To achieve these goals, the course is a combination of lecture, small group activities, standardized patient interviews, and self-directing learning. Course Directors and Instructors will weave the LCME standards hot topics, SLU SOM competencies, and ACGME Entrustable Professional Behaviors throughout the course, and content will come from best practices and national resources in medical student education.

MED 0102 - Clinical Diagnosis
1-20 Credits (Repeatable for credit)
The Clinical Diagnosis course will assist medical students in refining their skills in eliciting a medical history, performing the physical exam, developing a differential diagnosis, and developing clinical reasoning.

MED 0103 - Leadership in the Business of Medicine
1-12 Credits (Repeatable for credit)
As future leaders and professionals, medical students benefit from understanding core components of the US healthcare industry, business aspects of medical practice, and the ethical and fiduciary responsibilities of our profession related to these sectors. Grounded in the Mission and Values of the Saint Louis University School of Medicine, this curriculum prepares students for the contexts in which they will work and lead.

MED 0104 - Medicine & Society
1 Credit
In order to provide effective and culturally-sensitive patient care, students must develop an understanding of various social, cultural, and economic backgrounds of the patients that they serve, including barriers to effective care faced by patients.

MED 0105 - Fundamentals of Patient Safety
1-5 Credits
This is a longitudinal course that begins in year 1 (HQI 0101) and concludes in year 2 (HQI 0201), when students receive a final grade. This course combines lectures with web-based courses to provide students with a foundational knowledge of the issues surrounding patient safety in today's healthcare system. Students are required to create accounts on the Institute for Healthcare Improvement (IHI) website and complete two courses in the Open School: 1. Patient Safety and 2. Quality, Cost, and Value.

MED 0110 - Normal Structure and Function: Musculoskeletal
1-8 Credits (Repeatable for credit)
The Normal Structure and Function course is designed to provide students with a fundamental and integrated knowledge about the human body that will be foundational as they matriculate through medical school. The course contains 5 basic disciplines of study: Gross Anatomy, Histology, Embryology, Neuroscience and Physiology.

MED 0120 - Normal Structure and Function: Thorax & Head
1-6 Credits (Repeatable for credit)
The Normal Structure and Function course is designed to provide students with a fundamental and integrated knowledge about the human body that will be foundational as they matriculate through medical school. The course contains 5 basic disciplines of study: Gross Anatomy, Histology, Embryology, Neuroscience and Physiology.

MED 0130 - Normal Structure and Function: Abdomen & Pelvis
1-4 Credits (Repeatable for credit)
The Normal Structure and Function course is designed to provide students with a fundamental and integrated knowledge about the human body that will be foundational as they matriculate through medical school. The course contains 5 basic disciplines of study: Gross Anatomy, Histology, Embryology, Neuroscience and Physiology.

MED 0140 - Introduction to Pathology
3 Credits
The purpose of Introduction to Pathology is to introduce you to concepts and principles of general pathlogy, with a focus on patterns of cell and tissue response to injury, mechanisms of cell injury, the inflammatory process, thrombosis, neoplasia, normal and abnormal growth an development, and clinicopathologic correlation.

MED 0150 - Principles of Immunology, Pharmacology, and Therapeutics
6 Credits
The immune system is essential to human health; without it we quickly develop overwhelming microbial infections and even partial immune compromise leads to telltale types of infection. Even with a properly functioning immune system, it is difficult to consistently maintain health without the physician's arsenal of anti-microbial therapies. You will learn about the ontogeny and normal functions of the immune system and, as with any bodily system, its dysfunctions. Drug therapies cannot be discussed without the underpinning principles of pharmacology. You will learn how drugs act on their target receptors, how drugs are absorbed and metabolized once administered to a.

MED 0160 - Brain & Behavior
1-6 Credits (Repeatable for credit)
Brain and Behavior is a course that merges clinical neuroanatomy, neurology and psychiatry. The course reviews the normal structure and function of the nervous system and introduces neurological and psychiatric concepts to develop an understanding of human brain function essential for the practice of medicine. Fundamental and clinical neuroanatomy, neurology and psychiatry content is integrated throughout the sequence of lectures, laboratories, and active learning sessions.

MED 0170 - Cardiovascular System
4 Credits
This module is designed to examine several aspects of the cardiovascular system that are relevant to clinical practice.
**MED 0200 - Hematology**  
3 Credits  
The primary goal of Hematology is to help you understand the clinical and pathophysiologic principles of benign and malignant hematologic disease. We will focus primarily on thrombosis and hemostasis, disorders of red blood cells, and malignant hematology. We will also cover the principles of transfusion medicine and relevant microbial pathogens. In addition to preparation for third year, we believe that the course will be invaluable in your participation for the Step 1 examination.

**MED 0202 - Clinical Diagnosis**  
1-30 Credits (Repeatable for credit)  
The Clinical Diagnosis course will assist medical students in refining their skills in eliciting a medical history, performing the physical exam, developing a differential diagnosis, and developing clinical reasoning.

**MED 0203 - Leadership in the Business of Medicine**  
1-12 Credits (Repeatable for credit)  
tbd.

**MED 0204 - Medicine & Society**  
1 Credit  
tbd.

**MED 0205 - Fundamentals of Quality Improvement**  
1-3 Credits  
The course will use large group sessions and web-based modules from the Institute for Healthcare Improvement (IHI) Open School, along with case-based, patient discussions to develop skills and behaviors that contribute to healthcare quality improvement; understanding and navigating systems based practice, and leadership.

**MED 0210 - Respiratory System**  
4 Credits  
Year-2 students learn Pulmonary Medicine in a systemic manner from the perspectives of anatomy and pathology (gross/histologic), physiology, pharmacology, infectious diseases, and molecular biology. The module is designed to prepare students to diagnose and treat patients of all ages (neonatal through geriatric).

**MED 0220 - Renal Urinary System**  
4 Credits  
The Renal and Urinary Tract syllabus reflects the core information that the second year medical student should master to prepare for USMLE step 1 and clinical rotation s in years 3 and 4. This is based on an exhaustive review of the literature coupled with extensive feedback from faculty and students.

**MED 0230 - Gastrointestinal System**  
4 Credits  
The primary goal of this module is for you to learn the basic core of knowledge relating to gastrointestinal physiology, pathology, pharmacology, pathophysiology, elemental diagnostics, and disease prevention in a visually stimulating, concise, organized, and intellectually challenging way.

**MED 0240 - Endocrine and Reproductive System**  
4 Credits  
This module is designed to provide a comprehensive overview of the endocrine system of the human body.

**MED 0250 - Skin, Bone and Joint Module**  
4 Credits  
Course is an introduction to disorders of skin, bone, muscle, cartilage, and connective tissue. Specific clinical subtopics include dermatology, orthopedics, sports medicine, infectious agents, and rheumatologic disorders. Pathophysiologic/histologic features, clinical presentations, exam findings, and treatment concepts are addressed. Learning methodology includes lectures, supplemental readings, large group interactive demonstrations, and a skin biopsy lab.

**MED 0400 - Advanced M4 Leadership and Facilitation Elective**  
2 Credits  
The professional development journey from medical student to practicing physician involves the continual “scaling up” of professional identity, skills, and behaviors. A core aspect of this scaling up is the ability to guide, teach, and serve as a “near peer” role model and trainer for students a year or two earlier in their professional development journey. This course provides the opportunity for students (who previously served as M2 small group leader/facilitators for M1 small groups in Leadership in the Business of Medicine) to undergo formal “train the trainer” preparation and to train the next cohort of M2 Leader/Facilitators.

**MED 5100 - Molecular Foundations in Medicine**  
2 Credits (Repeatable for credit)  
Molecular Foundations in Medicine (MFM) reviews the fundamental underlying concepts of life: cell and molecular biology, biochemistry and genetics. The goals of this course are to: • provide a foundational understanding of the cell as the basic unit of life; • review the cellular physiology of proliferation, biosynthesis, bioenergetics, and waste disposal; • demonstrate how defects at the cellular and molecular level serve as the basis of human disease; • review the concept of genomic and personalized medicine; • lay the foundation for your subsequent coursework in anatomy, physiology, pathology, and pharmacology. 
**Restrictions:**  
Enrollment limited to students in the School of Medicine college.

**MED 5110 - Epidemiology and Biostatistics**  
1 Credit  
The Epidemiology & Biostatistics course is an introduction to the basic concepts of medical epidemiology and biostatistics. Learning methodology includes lectures, small group workshops, and practice exam questions. The course focuses on acquiring the skills required to understand and assess biomedical research. 
**Restrictions:**  
Enrollment limited to students in the School of Medicine college.

**MED 5140 - Introduction to Pathology**  
2 Credits  
Introduction to Pathology provides a brief introduction and overview of important disease processes in the practice of medicine. 
**Restrictions:**  
Enrollment limited to students in the School of Medicine college.

**MED 5150 - Principles of Immunology, Pharmacology, and Therapeutics**  
1 Credit  
The Introduction to Immunology course provides an introduction and overview of normal human immunology, as well as basic disease processes related to the immune system. 
**Restrictions:**  
Enrollment limited to students in the School of Medicine college.
MED 5960 - Master’s Capstone
2 Credits (Repeatable for credit)
Master’s Capstone.

Restrictions:
Enrollment limited to students in the School of Medicine college.