MD 800 ELECTIVE: SPECIAL TOPICS. (0-4)
This special topics course is for topics not covered elsewhere in the curriculum. It may count toward one elective requirement for graduation. Prereq: Students must be in good academic standing. Approval is at the discretion of Curriculum Committee.

MD 810 FOUNDATIONS OF INFECTION, DISEASE AND THERAPEUTICS. (10)
This course covers basic mechanisms that underlie many of the organ specific diseases, with a focus on biochemistry, genetics, infections, immune mechanisms of disease, inflammation and neoplasia. It will also discuss treatment of these entities and provide basic information on pharmacokinetics and pharmacodynamics. Prereq: Admission to Medical School (first year).

*MD 811 INTRODUCTION TO CLINICAL MEDICINE. (6)
The goal of the Introduction to Clinical Medicine (ICM) course is to provide students with opportunities to develop knowledge, skills, and attitudes about the doctor/patient relationship that are necessary to practice patient-centered and evidence-based care. ICM focuses on active learning approaches including training in communication and interviewing skills through practice with simulated patients (SPs) in small group and in laboratory settings, small group discussion on behavioral topics, experiential learning in clinical settings, and self-directed learning. Prereq: Admission to the College of Medicine.

#MD 812 CONTEMPORARY PRACTICE OF MEDICINE. (2)
The overall goal is for students to develop a deeper understanding of the interconnected issues that influence the health of populations and how to analyze approaches to improve health. This course uses current public health issues to understand evidence-based medicine and public health interventions. Prereq: Admission to the College of Medicine (first year).

MD 813 BEHAVIORAL BASIS OF MEDICINE. (3)
The Behavioral Basis of Medicine delivers key concepts from Psychiatry, Pharmacology and Behavioral Science in a mostly lecture-based format. Students are introduced to psychiatric conditions, to the observations that lead to a psychiatric diagnosis, and to some of the pharmacologic, psychotherapeutic and psychosocial modes of treatment. Prereq: Admission to Medical School (first year).

MD 814 CLINICAL ANATOMY AND RADIOLOGY. (9)
This course presents an integrated approach to the core gross and microscopic anatomy within the clinical context. Students will correlate basic anatomy into the interpretation of both radiologic images and physical examination findings. This course builds a foundation for the understanding of human anatomy essential to the remainder of the medical curriculum. Prereq: Admission to Medical School (first year).

MD 816 HEMATOLOGIC AND LYMPHATIC SYSTEMS. (4)
As part of the first-year organ system-based curriculum, this course covers the normal structure, development and function of the components of the hematopoietic and lymphoreticular systems; the pathophysiology of hematologic and lymphatic diseases and disorders; and the medical and pharmacological approaches to diagnosis and treatment. Prereq: Admission to Medical School (first year).

MD 817 NEUROSCIENCES. (8)
This course is an integrated presentation of relevant topics in human neuroanatomy, neurophysiology, neuropathology, neuropharmacology, and some microbiology as well as introductory correlations with neurology. Teaching methodology includes lecture, small group discussion, laboratory and self-study units. Prereq: Admission to Medical School (first year).

MD 818 MUSCULOSKELETAL AND INTEGUMENTARY SYSTEMS. (5)
As part of the first-year organ system-based curriculum, this course covers the normal physiology and histology of the musculoskeletal /integumentary systems, the pathophysiology of diseases and disorders of these systems, and the medical and pharmacologic approaches to diagnosis and treatment. Prereq: Admission to Medical School (first year).

MD 820 CONTEMPORARY PRACTICE OF MEDICINE. (2)
The overall goal of the course is for students to develop a deeper understanding of the interconnected issues that influence the health of populations and how to analyze approaches to improve health. This course uses current public health issues to understand evidence-based medicine and public health interventions. Prereq: Promotion to the second year of the M.D. program.
MD 821 ADVANCED CLINICAL MEDICINE. (4)
This course serves as a bridge between the basic and clinical sciences by teaching students the knowledge and skills necessary to develop into excellent diagnosticians. The course focuses on the following skills: the ability to interpret history and physical examination findings, integrate basic laboratory and radiographic data, and formulate a differential diagnosis. Learning activities include: formal lectures, textbook readings, small group tutorials, preceptorships, workshops, online modules, and written and practical testing. Prereq: Promotion to second year of M.D. program.

†MD 822 MUSCULOSKELETAL AND INTEGUMENTARY SYSTEMS.
†MD 823 HEMATOLOGIC AND LYMPHATIC SYSTEMS.

MD 824 ENDOCRINE AND REPRODUCTIVE SYSTEMS. (6)
As part of the second-year organ system-based curriculum, this team-taught course covers the normal physiology and histology of the endocrine and reproductive systems, the pathophysiology of diseases and disorders of these systems, and the medical and pharmacologic approaches to diagnosis and treatment. This course also covers the normal physiologic and developmental processes that accompany the transition from fetus (intrauterine) to newborn (extrauterine). Prereq: Promotion to the second year of the M.D. program.

MD 825 RENAL AND URINARY SYSTEMS. (4)
As part of the second-year organ system-based curriculum, this team-taught course covers the normal physiology and histology of the kidney and urinary system, the pathophysiology of renal and urinary diseases and disorders, and the medical and pharmacologic approaches to diagnosis and treatment. Prereq: Promotion to the second year of the M.D. program.

MD 826 CARDIOVASCULAR SYSTEM. (5)
As part of the second-year organ system-based curriculum, this course will cover the normal structure and physiologic function of the cardiovascular system, the pathophysiology of common disorders and diseases of the heart and vascular system, and the medical and pharmacologic approaches to diagnosis and treatment. Prereq: Promotion to the second year of the M.D. program.

MD 827 RESPIRATORY SYSTEM. (5)
As part of the second-year organ system-based curriculum, this course covers the normal structure and function of the respiratory system, the immunology and pathophysiology of respiratory diseases and disorders, and the medical and pharmacologic approaches to diagnosis and treatment. Prereq: Promotion to the second year of the M.D. program.

MD 828 GASTROINTESTINAL SYSTEM AND NUTRITION. (5)
As part of the second-year organ system-based curriculum, this course covers the normal histology, anatomy and physiology of the gastrointestinal system, the pathophysiology of gastrointestinal diseases and disorders, and the medical and pharmacologic approaches to diagnosis and treatment. The course also includes instruction on the principles of nutrition. Prereq: Promotion to the second year of the M.D. program.

MD 829 MULTISYSTEM AND INTEGRATIVE CONCEPTS. (3)
This course serves as the capstone course for the first- and second-year organ system-based curriculum. Students synthesize and apply the knowledge and concepts learned on an organ-based level to the multisystems level. Prereq: Promotion to the second year of the M.D. program.

*MD 830 PEDIATRICS CLERKSHIP. (7)
As part of the third-year core required clinical rotations, this clinical clerkship is designed to provide students with foundational knowledge in Pediatrics. Through a variety of clinical experiences, students will participate in the care of Pediatric patients. Students will develop and refine their clinical skills (e.g. interviewing, physical examination, differential diagnosis, and formulating diagnostic and treatment plans) for patient problems under the direct supervision of faculty preceptors. Clinical, 40-80 hours per week. Prereq: Promotion to Application Phase of M.D. curriculum.
*MD 831 EMERGENCY MEDICINE CLERKSHIP. (2)
As part of the third-year core required clinical rotations, this clinical clerkship is designed to provide students with foundational knowledge in Emergency Medicine. Through a variety of clinical experiences, students will participate in the care of Emergency Medicine patients. Students will develop and refine their clinical skills (e.g. interviewing, physical examination, differential diagnosis, and formulating diagnostic and treatment plans) for patient problems under the direct supervision of faculty preceptors. Clinical, 40-80 hours per week. Prereq: Promotion to Application Phase of M.D. curriculum.

*MD 832 NEUROLOGY CLERKSHIP. (4)
As part of the third-year core required clinical rotations, this clinical clerkship is designed to provide students with foundational knowledge in Neurology. Through a variety of clinical experiences, students will participate in the care of Neurology patients. Students will develop and refine their clinical skills (i.e. interviewing, physical examination, differential diagnoses, and formulating treatment plans) for patient problems under the direct supervision of faculty preceptors. Clinical, 40-80 hours per week. Prereq: Promotion to Application Phase of M.D. curriculum.

*MD 833 PSYCHIATRY CLERKSHIP. (4)
As part of the third-year core required clinical rotations, this clinical clerkship is designed to provide students with foundational knowledge in Psychiatry. Through a variety of clinical experiences, students will participate in the care of Psychiatry patients. Students will develop and refine their clinical skills (e.g. interviewing, physical examination, differential diagnosis, and formulating diagnostic and treatment plans) for patient problems under the direct supervision of faculty preceptors. Clinical, 40-80 hours per week. Prereq: Promotion to Application Phase of M.D. curriculum.

*MD 834 FAMILY MEDICINE CLERKSHIP. (4)
As part of the third-year core required clinical rotations, this clinical clerkship is designed to provide students with foundational knowledge in Family Medicine. Through a variety of clinical experiences, students will participate in the care of Family Medicine patients. Students will develop and refine their clinical skills (e.g. interviewing, physical examination, differential diagnosis, and formulating diagnostic and treatment plans) for patient problems under the direct supervision of faculty preceptors. Clinical, 40-80 hours per week. Prereq: Promotion to Application Phase of M.D. curriculum.

*MD 835 INTERNAL MEDICINE CLERKSHIP. (8)
As part of the third-year core required clinical rotations, this clinical clerkship is designed to provide students with foundational knowledge in Internal Medicine. Through a variety of clinical experiences, students will participate in the care of Internal Medicine patients. Students will develop and refine their clinical skills (e.g. interviewing, physical examination, differential diagnosis, and formulating diagnostic and treatment plans) for patient problems under the direct supervision of faculty preceptors. Clinical, 40-80 hours per week. Prereq: Promotion to Application Phase of M.D. curriculum.

*MD 837 SURGERY CLERKSHIP. (7)
As part of the third-year core required clinical rotations, this clinical clerkship is designed to provide students with foundational knowledge in Surgery. Through a variety of clinical experiences, students will participate in the care of Surgery patients. Students will develop and refine their clinical skills (e.g. interviewing, physical examination, differential diagnosis, and formulating diagnostic and treatment plans) for patient problems under the direct supervision of faculty preceptors. Clinical, 40-80 hours per week. Prereq: Promotion to Application Phase of M.D. curriculum.

*MD 838 OBSTETRICS AND GYNECOLOGY CLERKSHIP. (4)
As part of the third-year core required clinical rotations, this clinical clerkship is designed to provide students with foundational knowledge in Obstetrics and Gynecology (Ob/Gyn). Through a variety of clinical experiences, students will participate in the care of Ob/Gyn patients. Students will develop and refine their clinical skills (i.e. interviewing, physical examination, differential diagnoses, and formulating treatment plans) for patient problems under the direct supervision of faculty preceptors. Clinical, 40-80 hours per week. Prereq: Promotion to Application Phase of M.D. curriculum.
MD ENTRUSTMENT IN CLINICAL MEDICINE. (5)
This is a longitudinal course throughout the Application Phase of medical school and is designed to provide medical students with the foundational knowledge and beginning skills in preparation for the supervised practice of medicine. The course will utilize both large and small group settings for the acquisition of knowledge related to common topics related to the contemporary practice of medicine. Simulation using both standardized patients and simulators will provide realistic clinical scenarios to practice the wide range of skills necessary for medical practitioners. Prereq: Promotion to Application Phase of M.D. curriculum.

MD TRANSITION TO RESIDENCY. (4)
This course is designed to provide fourth year medical students with the foundational knowledge and skills in preparation for the supervised practice of medicine. Students will be divided into small groups dedicated to practice areas to hone the skill specific to their intended area of future practice. Within each group, students will review the foundational science and clinical applications of that knowledge. Simulation using both standardized patients and high fidelity simulators will provide realistic clinical scenarios to practice the wide range of skills necessary for medical practitioners. Prereq: Admission to fourth year of medical curriculum.

MD ELECTIVE: GERIATRICS. (4)
This course combines several teaching techniques to provide students with basic skills necessary to care for elderly patients in a variety of clinical settings. Fourth year students participate in a four-week block rotating at locations in Lexington, with emphasis on assessment and rehabilitation. Prereq: Promotion to the Advanced Development Phase of M.D. curriculum.

†MD ADVANCED CLINICAL PHARMACOLOGY AND ANESTHESIOLOGY.

MD EMERGENCY MEDICINE. (4)
This course will provide the students with an introduction to the field of Emergency Medicine, Emergency Medical Services (EMS), and the approach to the acutely ill or injured patient. The students will complete an ACLS class during this rotation. Laboratory, 40 hours per week. Prereq: Admission to fourth year of medical curriculum. (Same as ER 843.)

#MD ELECTIVE: THE NARRATIVE BASIS FOR PATIENT CARE AND RESILIENT PRACTICE. (4)
Narrative Medicine promotes a collaborative alliance of provider and patient that can improve care and satisfaction for both patient and provider. This course will examine and apply narrative methods to engage patients’ stories and lives through clinical visits, course readings, written exercises, reflections, and critiques. Prereq: Promotion to advanced development phase of M.D. curriculum.

#MD ELECTIVE: CLINICAL INFORMATICS ELECTIVE. (4)
The Clinical Informatics Elective is a four-week experience designed for the medical student who desires further experience in Health Information Systems, information technology, and data processing. Students will be exposed to technical and nontechnical aspects of practical informatics through a combination of independent learning modules, lectures, and mentorship with current UK HealthCare Clinical Informaticists and Information Technology Medical Directors. Students will have an opportunity to tailor portions of their course to individualize the content according to their specific career interests. Prereq: Promotion to the Advanced Development Phase of M.D. curriculum.

MD ELECTIVE: COMMUNITY ENGAGEMENT. (4)
Students are matched with a community partner based on experience, career goals, and agency needs. Students work with the program and the partner sites to develop a project plan that details clinical, leadership, scholarly and administrative activities, which are determined based upon learning outcome goals and agency initiatives. Primary responsibilities include clinical service with individuals, families, and groups, assessment/testing, clinical consultation, student supervision, and administrative duties. In addition, students may participate in program design and development, grant writing, training, or scholarly projects that are intended to improve services within the community agency. Prereq: Promotion to the Advanced Development Phase of M.D. curriculum.

#MD INTEGRATIVE MEDICINE. (4)
In this four week rotation, students will learn the philosophy and clinical practice of integrative medicine. Integrative Medicine emphasizes the therapeutic relationship between the patient and the physician and utilizes all modalities, both conventional and alternative. Learning will take place via readings, videos, online course modules, patient encounters, and experiential sessions. Hence students will have an in-depth and hands-on introduction to the field. Prereq: Promotion to Advanced Development Phase of M.D. curriculum.
**MD 860 ELECTIVE: DERMATOLOGY.** (4)

Students will spend mornings in the outpatient dermatology clinic and two afternoons per week with inpatient dermatology consultations. Each student will have the opportunity to evaluate and treat patients under the supervision of the attending physician. S/he will be able to observe and assist in minor surgical procedures. Students will attend and participate in didactic interactive sessions once or twice a week, and complete a required on-line dermatology module. Prereq: Promotion to Advanced Development Phase of M.D. curriculum.