MD 800 SPECIAL TOPICS COURSE. (0-4)
This special topics course will be used for students who must complete activities outside of the medical curriculum in order to meet graduation requirements. In particular, students who must complete prescribed remediation that does not involve repeating a formal course or who must complete licensing exams in order to graduate would use this mechanism. Additionally, this course could be used for student research activities. Prereq: Permission of the Dean of the College of Medicine.

#MD 810 FOUNDATIONS OF DISEASE AND THERAPEUTICS. (9)
Through lecture, small group, and laboratory exercises, this course teaches the core principles of microbiology, immunology, pharmacology, pathology, and some physiology. It provides a framework for understanding the relationship between these disciplines and how they contribute to clinical systems. This course prepares students for the second year organ systems courses, clinical rotations and the national medical licensing exam. 20 hours per week. Prereq: Admission to Medical School (first year).

*MD 811 INTRODUCTION TO CLINICAL MEDICINE I. (10)
Introduction to Clinical Medicine I is a year-long course for first-year medical students, designed to develop applied behavioral and professional skills relevant to the practice of medicine and in preparation for clinical rotations, to build a foundation of behavioral science knowledge relevant to medical practice, and to develop an awareness of professionalism and ethical issues foundational to the practice of medicine. Prereq: Admission to the College of Medicine.

†MD 812 HUMAN STRUCTURE/CELL AND TISSUE BIOLOGY.

#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 ANATOMY. (9)
The course consists of lecture, small group, laboratory, and palpation exercises that provide a basic understanding of anatomical principles, organization and development as well as the core principles of histology. Anatomical structures are introduced as a basis for future functional correlates and principles are taught via laboratory discussions, prosections, dissections, films and skeletal materials. Lecture, 20 hours per week. Prereq: Admission to Medical School (first year).

†MD 815 NUTRITION FOR PHYSICIANS I.

MD 816 CELLULAR STRUCTURE AND FUNCTION/GENETICS. (4)
The course combines small group meetings, lecture, clinical correlations, problem-based learning, and problem-solving sessions in providing an understanding of the relationship of human genetics to human health and disease. Close integration with biochemistry topics provides a better picture of how biochemistry, genetics and molecular biology contribute to normal human development and medicine. Lecture, 20 hours per week. Prereq: Admission to Medical School (first year). (Same as MI 816.)

*MD 817 NEUROSCIENCES. (6)
The course is an integrated presentation of relevant topics in human neuroanatomy, neurophysiology, neuropathology, neuropharmacology and some microbiology, as well as introductory correlations with neurology and psychiatry. Teaching methodology includes lecture, small group discussion, laboratory and self-study units. Lecture, 20 hours per week. Prereq: Admission to Medical School (first year).

†MD 818 HUMAN FUNCTION.

MD 819 CELLULAR STRUCTURE AND FUNCTION/BIOCHEMISTRY. (7)
The course combines lecture, small group activities, clinical correlations, problem-based learning, and problem-solving sessions in providing an understanding of the relationship of biochemical principles to human health and disease. Close integration with genetics topics provides a better picture of how biochemistry, molecular biology and genetics contribute to normal human development and medicine. Lecture, 20 hours per week. Prereq: Admission to Medical School (first year). (Same as BCH 819.)
MD 821 INTRODUCTION TO CLINICAL MEDICINE III. (6)
This course is an intermediate clinical medicine course combining small-group tutorials, lectures, and practical experience. Second year medical students participate in three components: interviewing and communication skills, radiology and laboratory skills, and physical examination and diagnosis. Prereq: MD 811 and MD 820.

MD 822 IMMUNITY, INFECTION, AND DISEASE. (9)
The course provides basic concepts of immunology and of bacterial, viral, fungal and protozoal biology. It focuses on mechanisms of human immunity, immunologically mediated disease, and pathogenesis in infectious disease. The material covered includes relevant pathology associated with both immunologic and infectious diseases, and a brief summary of infectious diseases from an organ system perspective. Lecture, 20 hours per week. Prereq: Admission to second year of medical curriculum. (Same as MI 822.)

MD 823 MECHANISMS OF DISEASE AND TREATMENT/PATHOLOGY. (9)
This is a course in basic mechanisms of disease causation and specific diseases of the organ systems. It introduces fundamental disease processes and the pathophysiology of major diseases affecting each of the organ systems. It stresses how disease alters normal structure and function and is closely integrated with PAT 824. Various teaching methodologies utilized include lectures, small group discussions, workshops, case studies, and computer-assisted instruction. Lecture, 20 hours per week. Prereq: Admission to second year of medical curriculum. (Same as PAT 823.)

MD 824 MECHANISMS OF DISEASE AND TREATMENT/PHARMACOLOGY. (7)
This course introduces the principal actions of substances which are used as drugs for treatment of diseases and suffering in humans. It will cover the general principles of drug action, how drugs alter the function of normal and pathologic tissues and organisms and how they influence the disease process. Drugs used in the treatment of disease processes will be integrated with discussion of those diseases in PAT 823. Lecture, 20 hours per week. Prereq: Admission to second year of medical curriculum. (Same as PHA 824.)

MD 825 NUTRITION FOR PHYSICIANS II. (1)
This course is designed to give the future physician an understanding of the role of nutrition in disease treatment and management. The overall goal of this course is to provide physicians with the training and background necessary to determine the nutritional requirements and/or recommendations for their patients in light of their current disease state. A key element of this course design will be to coordinate the nutrition topics with other Year Two Medical courses to further reinforce and apply their knowledge. Specific areas to be covered include the medical nutrition therapy for cardiovascular disease, hypertension, obesity, diabetes, metabolic syndrome, gastrointestinal; renal, and osteoporosis. Knowledge of these topic areas will be conveyed to the students through a combination of lectures, assigned readings, experiential assignments, on-line tutorials, cases discussions, knowledge application and analysis. This course is designed to be integrated with other Year Two Medical courses so as to reinforce and build upon their knowledge via a relevant context. Prereq: Satisfactory completion of Nutrition for Physicians I.

MD 826 MECHANISMS OF DISEASE AND TREATMENT/PSYCHIATRY. (2)
This is an introduction to psychopathology and the psychiatric nomenclature for second year medical students. It occurs during the spring and fits within the context of the larger pathology segment of MD 826. Integration with the pharmacology sequence that runs before and after is in place. Prereq: Promotion to the second year of medical school. (Same as PSC 826.)

MD 830 PEDIATRICS. (8)
This clinical course would provide an opportunity for students to care for the pediatric patient in multiple settings, including inpatient wards, newborn nursery and in the primary care setting. Students participate in patient-centered teaching. Students interview, examine, and formulate treatment plans for patient problems under the direct supervision of their residents and faculty preceptors. Laboratory, 40 hours per week. Prereq: Admission to third year of medical curriculum.

MD 831 INTERNAL MED/EM MED INTEGRATED CLERKSHIP. (4)
This course will provide 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. Clinical, 40 hours per week. Prereq: Admission to third year of medical curriculum.
MD 832 CLINICAL NEUROSCIENCE: NEUROLOGY. (4)
The course will diagnose the common, acute, and emergency problems of disease of the central nervous system. Prereq: Completion of 2nd year of medical school.

MD 833 CLINICAL NEUROSCIENCES/PSYCHIATRY. (4)
This course provides opportunity for third year medical students to recognize, treat, and understand the etiology and pathology of common psychiatric disorders and emergencies. Laboratory, forty hours per week. Prereq: Admission to third year of medical curriculum.

MD 834 PRIMARY CARE/FAMILY AND COMMUNITY MEDICINE. (4)
This course introduces third year medical students to primary care family practice in rural and urban settings. Students participate in patient-centered teaching during which they work with primary care Family Physicians seeing ambulatory patients in their offices. Students are allowed to interview, examine, and formulate treatment plans for patient problems under the direct supervision of their faculty preceptors. Prereq: Admission to third year of medical curriculum.

MD 835 INTERNAL MEDICINE/EMERGENCY MEDICINE INTEGRATED CLERKSHIP. (12)
This course is an introduction to the concepts of internal medicine in both inpatient and outpatient settings. Students interview, examine and formulate treatment plans for patient problems under the direct supervision of faculty preceptors. The course will use didactics, computer simulated problems as well as clinical material and experiences to integrate basic sciences into the practice of medicine. Clinical, 40 hours per week. Prereq: Admission to third year of medical curriculum.

MD 837 MEDICAL SURGICAL CARE/SURGERY. (8)
This course is an introduction to the concepts in surgery. It is designed around the principles of Problem Based Learning to help students solve complex surgical problems. The course will use didactic exercises, computer simulated problems and clinical material and experiences to integrate basic sciences into the practice of medicine and surgery. Laboratory, 40 hours per week. Prereq: Admission to third year of medical curriculum.

MD 838 OBSTETRICS AND GYNECOLOGY. (4)
The clerkship will provide an opportunity for students to see the cycle of birth and neonatal care and to observe the mother/infant relationship through the outpatient clinic, labor and delivery, the newborn nursery, and the follow-up examination. Laboratory, 40 hours per week. Prereq: Admission to third year of medical curriculum.

*MD 840 INTERNSHIP 101. (1)
This course is designed to provide the student with practical knowledge of the role of the intern by review and practice in lab (COMLC) and simulation center of specific generic skills necessary for the successful navigation of the PGY1 year. Prereq: Successful completion of all M1-M4 requirements.

MD 841 GERONTOLOGY. (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. Laboratory, 40 hours per week. Prereq: Admission to fourth year of medical curriculum.

MD 842 ADVANCED CLINICAL PHARMACOLOGY AND ANESTHESIOLOGY. (4)
This course uses lectures, interactive small groups, and firsthand experience to introduce anesthesiology as it relates to pharmacology and physiology. The course also teaches pharmacology and therapeutics utilizing clinical cases. Students develop their own personal formularies during the course. Laboratory, 40 hours per week. Prereq: Admission to fourth year of medical curriculum.

MD 843 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 860 CLINICAL DERMATOLOGY I. (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: Successful completion of third year rotations.