MD 810 PHYSICIANS, PATIENTS, AND SOCIETY I. (4)
In small groups, students and their assigned preceptors will study written clinical scenarios. Students will investigate, contemplate, comprehend, and discuss biological, clinical, psychological, economic, social, legal, and ethical issues concerning the problem-based histories. Prereq: Admission to Medical School (first year). (Same as BSC 810.)

MD 811 INTRODUCTION TO THE MEDICAL PROFESSION I. (7)
This course combines small-group meetings, lectures, and practical experience in providing students with the basic skills necessary to successfully engage in clinical rotations. First year medical students participate in four modules: observation period, interviewing and communication, clinical decision making, and physical examination. Prereq: Admission to Medical School (first year).

MD 812 HUMAN STRUCTURE/CELL AND TISSUE BIOLOGY. (4)
The organization of cells, tissues and organs is presented in lectures and in the laboratory through the study of in vivo materials, histological sections and electron microscopic illustrations with focus on the correlation of structure and function. Small group discussions on select topics supplement full classroom work. Lecture, 20 hours per week. Prereq: Admission to Medical School (first year). (Same as ANA 812.)

MD 813 HEALTHY HUMAN. (2)
The course uses problem-based learning, lectures, and small group discussions to introduce students to the concepts of health and human development. Lecture, four hours per week. Prereq: Admission to Medical School (first year).

MD 814 HUMAN STRUCTURE/GROSS ANATOMY. (6)
The course consists of lecture, small group, laboratory, and palpation exercises that provide a basic understanding of anatomical principles, organization and development. 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). (Same as ANA 814.)

MD 816 CELLULAR STRUCTURE AND FUNCTION/GENETICS. (3)
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 and neurophysiology 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. (8)
This course provides in-depth instruction on the physiological mechanisms of body function from the single cell to the organism level. The course is taught by medical scientists and clinicians. Teaching methodologies include didactic and Socratic lectures, small group discussions, demonstrations and live model and computer simulated laboratories. Lecture, 20 hours per week. Prereq: For MD 818/PGY818: Admission to medical school (first year). For OBI 814: Admission to the Dental School and OBI 812. (Same as OBI 814/PGY 818.)

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 820 PATIENTS, PHYSICIANS, AND SOCIETY II. (5)
In this course, students will approach written clinical scenarios with initiative by researching, gathering, and selecting materials to produce resource packets within and for their tutorials. Students will be challenged with complex ethical, legal, social, psychological, economic and biological issues. Prereq: Admission to second year of medical curriculum. (Same as BSC 820.)
### MD 821 INTRODUCTION TO THE MEDICAL PROFESSION II. (7)
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.

### 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 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 WOMEN’S MATERNAL AND CHILD HEALTH/PEDIATRICS. (6)
This course will provide an opportunity for the students to see the cycle of birth and neonatal care and to observe the mother/infant relationship through labor and delivery, the newborn nursery, and the follow-up examination. Inpatient pediatrics will be a component of this rotation. Laboratory, 40 hours per week. Prereq: Admission to third year of medical curriculum.

### MD 832 CLINICAL NEUROSCIENCES/NEUROLOGY. (4)
This course provides opportunity for third year medical students to recognize, treat, and understand the etiology and pathology of common neurologic disorders and emergencies. Laboratory, forty hours per week. Prereq: Admission to third year of medical curriculum.

### 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 PRACTICE. (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 PRIMARY CARE/INTERNAL MEDICINE. (4)
This clinical course introduces third year medical students to primary care internal medicine practice in rural or urban settings. Students participate in patient-centered teaching during which time they work with primary care internists in their clinics. Students interview, examine, and formulate treatment plans for patient problems under the direct supervision of their faculty preceptors. Laboratory, 40 hours per week. Prereq: Admission to third year of medical curriculum.
MD 836 MEDICAL SURGICAL CARE/Medicine. (8)
This course is an introduction to the concepts of internal medicine. It is designed around the principles of Problem Based Learning to help students solve complex medical problems. The course will use didactic exercises, computer simulated problems and clinical material and experiences to integrate basic sciences into the practice of medicine. Laboratory, 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 WOMEN'S MATERNAL AND CHILD HEALTH/OBG. (6)
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 839 PRIMARY CARE/PEDIATRICS. (4)
This clinical course introduces third year medical students to primary care pediatric practice in rural or urban settings. Students participate in patient-centered teaching during which time they work with primary care pediatricians in their clinics. Students interview, examine, and formulate treatment plans for patient problems under the direct supervision of their faculty preceptors. Laboratory, 40 hours per week. Prereq: Admission to third year of medical curriculum.

MD 840 DEAN'S COLLOQUIUM. (1)
A two week experience which serves as a summation of the medical school experience and a transition to the role as practitioner. It will be taught using multiple educational formats. Lecture, 20-30 hours per week. Prereq: Admission to fourth year of medical curriculum.

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. (6)
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. (Same as PHA 842.)

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.)