

# Internal Medicine

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Before being assigned to an inpatient medical service, all students learn techniques of obtaining a medical history and performing a physical examination. Each student must then take an 8-week Basic Medicine Clerkship in internal medicine. After successful completion of this phase of education, students interested in obtaining greater mastery of the content and principles of internal medicine may choose from a variety of advanced clerkships and electives in medical subspecialties.

## **MED 900. Internal Medicine Clerkship. 0-8 Credits.**

During the clinical clerkship the student develops understanding of health maintenance and the spectrum of disease processes specific to adults. Students will have the opportunity to gain an understanding of Internal Medicine through patient interviews, physical examination, review of imaging and laboratory studies, development of assessments and plans, and a variety of other educational experiences. The clerkship will expose students to the management of general medicine and subspecialty medicine patients in both inpatient and outpatient settings including the Kansas City Veterans Administration Hospital. Prerequisite: Medical Basic Sciences.

## **MED 901. General Medicine--Veterans Administration Medical Center. 4 Credits.**

The student will be assigned to one of the general medical wards where the student will function in the role of subintern (e.g., the student will be assigned patients to work up and will be expected to assume partial responsibility for their diagnostic and therapeutic program). The number of patients assigned and the amount of responsibility given will vary with the student's ability. At all times the student will work closely with a staff physician or senior resident who will be responsible for the student's education. Offered in modules I-XII. Prerequisite: MED 900.

## **MED 902. Advanced Topics in Internal Medicine. 4 Credits.**

The objective of this course is to provide students with advanced experience in the management of acutely-ill medical patients. Students will be assigned to Kansas University Medical Center and will participate in the diagnosis and treatment of common medical conditions in a role similar to that of a resident. Clinical work will be supplemented by conferences and other educational activities. Prerequisite: MED 900.

## **MED 905. Critical Care: Coronary Care Unit. 4 Credits.**

Critical care is an integral aspect of medical education. The purpose of the 4th-year critical care selective rotation is to allow students to participate in the management of the critically-ill patient in a specialty area of interest not experienced during the third year of training. Each subspecialty critical care rotation provides the student with the core knowledge necessary for the care of critically-ill patients, an appreciation of management issues unique to this patient population, and the technical skills that one must incorporate for effective patient care. The student will act as an integral part of the critical care team with an emphasis on increased patient care responsibility and autonomy. Most importantly, this educational purpose will be founded on the core competencies set forth by the University of Kansas School of Medicine. Clinical work will be supplemented by conferences and other educational activities. This course fulfills the Critical Care Selective requirement. Prerequisite: fourth year standing.

## **MED 907. Ambulatory Specialties Selective in Dermatology. 2 Credits.**

Two-week course composed of outpatient clinic experience, tutorial sessions, and audiovisual material available in the educational resource center (ERC) will enable the medical students to diagnose the most

prevalent skin diseases and perform an adequate history and physical examination needed to establish these diagnoses. There will be an opportunity to attend a monthly Kansas City Dermatological Society meeting on the third Thursday of most months, and attend at least twice weekly conferences given by the dermatology residents to the medical students. Prerequisite: fourth year standing.

## **MED 908. Subinternship in Internal Medicine. 4 Credits.**

The objective of this course is to provide students with advanced experience in the management of acutely-ill medical patients. Students will be assigned to Kansas University Medical Center and will participate in the diagnosis and treatment of common medical conditions in a role similar to that of a resident. Clinical work will be supplemented by conferences and other educational activities. This course fulfills the Subinternship Selective requirement.

## **MED 910. Clinical Cardiology. 4 Credits.**

This course in cardiology offers an experience in the clinical evaluation and treatment of patients with a variety of cardiovascular problems. The students, as sub-interns, will function on the cardiovascular service as an integral part in the care of the seriously-ill patient with a wide range of problems. The students will participate in cardiovascular rounds with one of the members of the cardiology staff, during which time clinical skills in bedside diagnosis and auscultation will be emphasized and developed. They will have an opportunity to develop expertise in the interpretation of electrocardiograms daily. The treatment of arrhythmias and heart failure will be stressed. They may also have an opportunity to follow patients through cardiac catheterization procedures or TEE and to participate in the computation and assessment of the catheterization date. The elective schedule includes two weeks on CV1, one week on consult rounds (CON1), and one week on advanced heart failure rounds.

## **MED 912. Critical Care: Medical Intensive Care Unit. 4 Credits.**

Critical care is an integral aspect of medical education. The purpose of the 4th-year critical care selective rotation is to allow students to participate in the management of the critically-ill patient in a specialty area of interest not experienced during the third year of training. Each subspecialty critical care rotation provides the student with the core knowledge necessary for the care of critically-ill patients, an appreciation of management issues unique to this patient population, and the technical skills that one must incorporate for effective patient care. The student will act as an integral part of the critical care team with an emphasis on increased patient care responsibility and autonomy. Most importantly, this educational purpose is founded on the core competencies set forth by the University of Kansas School of Medicine. Clinical work will be supplemented by conferences and other educational activities. This course fulfills the Critical Care Selective requirement.

## **MED 914. Wilderness Medicine. 4-8 Credits.**

The purpose of the 4th year Wilderness Medicine selective is to allow students to participate in a unique setting as medics in the Philmont Scout Ranch Infirmary in Cimarron, New Mexico. Students will provide care for Philmont staff and scouting participants. Care will be provided both in the Infirmary, as an acute walk-in care clinic, and in the backcountry where staff and scouts participate in high-adventure activities such as hiking, horseback riding, climbing, and fishing. The students will be the frontline healthcare support under the supervision of attending physicians. Students will also provide medical support through radio calls to the backcountry and work with emergency medical technicians (EMTs) for transport and onsite medical care. This rotation is an opportunity to provide medical care without technological conveniences such as in-house lab support or radiology support. This rotation also emphasizes the importance of triage to a higher level of care when necessary, as well as procedures such as suturing, injections, EKG administration, and IV

placement. This rotation emphasizes increased patient care responsibility and autonomy. This is a unique opportunity to practice medicine in a rustic environment, highlighting the necessity for history taking and physical exam. Clinical work will be supplemented by virtual training and in-person training before the rotation. Prerequisite: Physical Diagnosis, Pathology and Pharmacology.

**MED 920. Advanced Gastroenterology. 4 Credits.**

This course is directed towards problems of gastrointestinal disease. The clinical student sees inpatient consultations and outpatient consultations with an emphasis on the inpatient side. About 75% of the experience is with General Gastroenterology and the remainder with Hepatology including care of liver transplant patients. The student will also observe several diagnostic and therapeutic endoscopy procedures. Prerequisite: MED 900 or permission of instructor.

**MED 921. Clinical Gastroenterology--Veterans Administration Medical Center. 4 Credits.**

The manifestations of gastrointestinal disease will be presented to the student by participation in consultation rounds and endoscopy. The student will be a member of a team composed of a staff gastroenterologist, a fellow, and a medical resident. At the completion of the course, the student will be familiar with the manifestations of gastrointestinal diseases, their diagnostic evaluation, and their treatment. The student will learn the indications and contraindications of gastrointestinal procedures. The student will be evaluated on a daily basis by the staff gastroenterologist as the student interviews and examines patients and makes recommendations for their diagnostic and therapeutic measures on consultation rounds. Prerequisite: MED 900 or permission of instructor.

**MED 925. Interdisciplinary Community Partnership. 4 Credits.**

This course offers an interdisciplinary eight-week experience outside tertiary care, dealing with community health issues and impact on individual and population health. Students will be engaged on-site with social service, public health agencies, and/or indigent-care clinics. Students will contribute to services related to disease prevention, health promotion, quality of life, health insurance, poverty prevention and other healthcare issues. Students will gain insight into the challenges of specific populations within the community, as well as the agencies and programs that serve their needs. Students will complete a comprehensive project related to a particular need of the agency and/or the population that they agency serves. Common examples include needs assessments, grant development, health interventions, research surveys, and curriculum development. In addition, students will be required to complete an oral or poster presentation describing their project, and a written report of their internship experience.

**MED 930. Clinical Hematology. 4 Credits.**

This will consist of inpatient and outpatient care, dealing with all types of hematologic disorders. The student will be given experience and instruction in morphology of peripheral blood and bone marrow. Weekly conferences, didactic and participating study sessions with the hematology staff will be conducted. Offered in modules I-XII. Prerequisite: MED 900 or permission of instructor.

**MED 935. Infectious Disease. 4 Credits.**

Students participating in this elective will be assigned to an inpatient Infectious Diseases consultation service and provided the opportunity to participate actively in the assessment of new consults and follow-up care under the supervision of Faculty and Fellows in the Division of Infectious Diseases. Infectious Diseases consultative care provides invaluable experience in developing skills in history-taking, evaluation of social and exposure histories, physical examination, and in inpatient and outpatient management of both common and rare infections. The ID consultation

service provides a wide spectrum of experience including nosocomial infections, infections in immunosuppressed patients including HIV, and fever of unknown origin, as well as many other conditions. Students will also be exposed to experiences in clinical microbiology, antimicrobial stewardship, and care of patients in a variety of medical specialties with consultations from surgical teams, General Medical and Family Medicine teams as well as Critical Care, Neurology, and Obstetrics. A solid background in infectious diseases will aid the student in cultivating skills needed for residency and that will be used regularly in ANY field of future practice. Prerequisite: MED 900 or permission of instructor.

**MED 936. Infectious Disease- Veterans Administration Medical Center. 4 Credits.**

The Infectious Disease section at the VA medical center is responsible for an active inpatient consult service. The student will be responsible for seeing the consult patients with the resident and/or Infectious Disease fellow, recommending initial diagnostic and therapeutic management, and presentations to the Infectious Disease staff physician. The clinical experience will be supplemented with didactic discussions and an introduction to medical microbiology in the clinical laboratory. Prerequisite: MED 900 or permission of instructor.

**MED 940. Clinical Endocrinology and Metabolism. 4 Credits.**

This course provides an introduction to endocrinology and metabolism with special emphasis on diagnosis and management of selected patients with this category of disease. Students will participate directly in patient evaluation. Prerequisite: MED 900 or permission of instructor.

**MED 950. Clinical Nephrology-University of Kansas Medical Center. 4 Credits.**

In this course, the student will have access to an active nephrology service at the University of Kansas Medical Center or the Veterans Administration Medical Center. Inpatient activities center around the diagnosis and treatment of patients with medical diseases of the kidney. Clinical students are assigned patients on one of 4 inpatient consult services. The student is expected to function at a subintern level. Under the guidance of the fellow/attending physician, they provide the primary work-up, write admitting orders and assist in performing procedures such as peritoneal dialysis and hemodialysis. Students meet regularly with the attending nephrologist to discuss specific topics in renal physiology and pathogenesis. A formal nephrology conference for all housestaff and students is held weekly. Two positions are available at the University of Kansas Medical Center. Prerequisite: MED 900.

**MED 970. Clinical Oncology Elective. 4 Credits.**

The student will participate actively in the care of the oncology patients on an in- and outpatient basis. This includes participation in consultation rounds, and subspecialty clinics. Clinical investigation with both conventional and experimental drugs will be stressed and an opportunity to treat patients on cancer-specific protocols will be provided. Prerequisite: MED 900 or permission of instructor.

**MED 972. Palliative Medicine. 2-4 Credits.**

This elective rotation serves to expose the student to palliative care in the hospital setting. The student will work with a team of physicians, advanced practice providers, social workers and other learners as they take care of patients at all stages of illness. Clinical focus will be to gain knowledge and skills in practical symptom management, ascertaining goals of care, understanding and communicating prognosis, and addressing psychosocial needs. There will be specific emphasis on understanding the relationship between hospice and palliative care, the complexities of health care delivery for the seriously ill, and working as part of an interprofessional team. Prerequisite: MED 900.

**MED 980. Clinical Allergy, Immunology, and Rheumatology. 4 Credits.**

Students will participate in a split rotation with KUMC allergy outpatient clinics and rheumatology inpatient service (2 weeks each). Students will perform medical evaluations, select appropriate diagnostic procedures and define specific therapy on assigned patients under the supervision of the staff. They will receive an orientation to clinical testing in current use and be expected to interpret the results of these appropriately. #Lectures by the staff #and fellows are given in areas of allergy and rheumatology that are held weekly in a virtual setting. Prerequisite: MED 900 or permission of instructor.

**MED 995. Dermatology. 4 Credits.**

This course is composed of outpatient clinic experience, tutorial sessions utilizing audiovisual aids extensively, and inpatient teaching rounds, as well as frequent reviews of pertinent aspects of dermatological allergy, microbiology, and histopathology. There will be opportunities to attend special weekly dermatological basic science lectures and grand rounds. Acquired skills in dermatological diagnosis (disease recognition, as well as analytical reasoning, or problem-solving) and in dermatological therapy will be evaluated by a presentation at the end of the rotation. Prerequisite: MED 900.

**MED 998. Advanced Studies in Geriatric Medicine. 4-12 Credits.**

An advanced course of one to three months specially arranged for each student to encompass a clinical research project. There will be participation in clinics and consultations as appropriate. Offered in modules I-XII. Prerequisite: MED 900.

**MED 999. Internal Medicine Student Chief Elective. 4 Credits.**

Students selected for enrollment in this elective will serve as "Internal Medicine Student Chiefs" in association with the required Internal Medicine clerkship. IM Student Chiefs will help to orient M3 students to expectations of the Internal Medicine clerkship and student roles. The IM Student Chiefs are to serve as student leaders and be available to the M3 students on the Internal Medicine clerkship for support with experience, understanding and skills required to successfully complete the IM Clerkship. Student IM Chiefs will have roles in organization of rotations, as a liaison to faculty and will be provided educational modules on Clinical education. Students interested in being an IM Student Chief need to apply with support from their Coach and support from 1 additional faculty member and will be selected by the IM Clerkship Leadership as space allows. Please email for application packet or information to ltandberg@kumc.edu. Prerequisite: MED900.