Internal Medicine

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 901. General Medicine–Veterans Administration Medical Center. 4 Hours.
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. FLD.

MED 902. Advanced Topics in Internal Medicine. 4 Hours.
Offered in modules I-XII. Prerequisite: MED 900 and special arrangement with department. FLD.

MED 903. Research Topics in Internal Medicine. 4 Hours.
Offered in modules I-XII. Prerequisite: Special arrangement with department. IND.

MED 906. Advanced General Medicine - Leavenworth Veterans Administration Medical Center. 4 Hours.
The student will function in the role of a sub-intern on the Medicine I Teaching Service. He/She will assume partial responsibility for the diagnostic and therapeutic program for assigned patients. The number of patients and level of responsibility will be accommodated to the individual's educational goals and ability. Emphasis will be placed on the clinical and practical approach to the patient including differential diagnosis, pathophysiology, and management strategies. At all time the student will work closely with the Chief, Medical Service who is in charge of the Teaching Unit. Evaluation of the student's performance during the clerkship will be based on faculty's assessment of the student's clinical and conference participation. Prerequisite: MED 900. FLD.

MED 907. Ambulatory Specialties Selective in Dermatology. 2 Hours.
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 a syllabus available from the secretaries in the dermatology office. 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. Some medical students will have the opportunity to spend two weeks with a dermatologist in private practice in the Kansas City area (or Topeka) instead of spending the time at the University of Kansas Medical Center Dermatology department. Those students are encouraged to attend the lectures given by the dermatology residents. LEC.

MED 909. Clinical Elective in General Medicine Consultation and Hospital Based Medicine Practice. 4 Hours.
The student(s) will be exposed to the arena of general medicine consultation and hospital based medicine practices. The students would be responsible for performing initial evaluation and work up of new general medicine and/or geriatric consultations as well as the ongoing care of the patient's medicine issues. This experience would be unique in that the attending of record is not a general internist but often a surgeon, rehab specialist, etc. The students would learn the art and science of being a consultant-from evaluating medical conditions as they arise in the surgical and rehabilitating patient communicating with referring physicians, providing concurrent care, diagnostically and therapeutically of serious ongoing medical issues. In addition, the student would become well versed in the pre-operative evaluation of patients, as this can be a substantial part of a general internist's practice. Finally, the student will gain insight to what it is like to have a hospital-based practice by working directly with two hospitalists for KUMC. One of the responsibilities of the elective would be to prepare and give a short presentation on an issue of consultative medicine that would be presented in small group format but could also be used in care-based format to present in other arenas if so desired. FLD.

MED 910. Clinical Cardiology. 4 Hours.
The clerkship 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 make cardiovascular rounds with one of the members of the cardiology staff, during which time clinical skills in bedside diagnosis, auscultation and palpation will be emphasized and developed. They will have an opportunity to develop expertise in interpretation of electrocardiograms on a daily basis. The treatment of arrhythmias and heart failure will be stressed. They will also have an opportunity to evaluate in-hospital consultations as well as outpatient consultations and to see postoperative follow-up patients. They will have an opportunity to follow patients through cardiac catheterization procedures and to participate in the computation and assessment of the catheterization data. Indication for cardiovascular operations will be emphasized to weekly conferences. FLD.

MED 911. Coronary Care Unit and Electrocardiography–Veterans Administration Medical Center. 4 Hours.
The student will function as a sub-intern in the Coronary Care Unit with the cardiovascular fellow and cardiology subspecialty resident. The patient material consists of all the patients in the VA medical center with acute myocardial infarction, rule out acute myocardial infarction, pre-infarction syndrome and problem arrhythmias. The student will also develop expertise in electrocardiography and read a portion of the daily EKG's independently and in collaboration with the cardiovascular resident or fellow and the cardiologist. Offered in modules I-XII. Prerequisite: MED 900 or permission of instructor. FLD.

MED 915. Comprehensive Care of the Complex Adult. 4 Hours.
The objective of this four week elective is to enhance the student's ability to care for complex adult patients in various systems of care. Clinically, the student will rotate through selected clinical centers of care at the University of Kansas. There will be a focus on three facets of the care: the clinical content and context, the patient's experience and the structure of the specific systems of care. Through experience, didactic presentations on systems of care, focused observation and reflection, the student will be able to better define the organization of clinical systems of care and to recognize how to ‘diagnose’ and to help collaborate in improving systems of care. These skills will likely be of great benefit for understanding elements of the core competency of ‘systems based practice’, and practically applying that knowledge to the new systems of care encountered in residency. CLN.
MED 916. Integrative Medicine. 4 Hours.
Course objectives are to expose medical students to other healing fields through readings, lectures and seminars, field observations, performing an independent review, and presenting a paper at the conclusion of the course. The students are expected to evaluate the claims of various practices critically and be rigorous in their questioning of all forms of human healing including practices currently considered mainstream. The students are expected to become aware of various practices that patients may be using so that they can be better informed physicians and be more comfortable in discussing these areas with patients whom may be interested in using them or are already doing so. The students should also learn to communicate effectively with practitioners of complementary and alternative medicine therapies. LEC.

MED 920. Advanced Gastroenterology Clerkship. 4 Hours.
This clerkship is directed toward specific problems of gastrointestinal disease. The clinical clerk is involved in ward care and ward work, including admission work-up of patients, their daily care, staff rounds, X-ray interpretation, treatment of specific GI disease, long term therapy, and follow-up in the outpatient clinic. The clerk is supervised by the GI resident or fellows and can participate in special GI procedures on patients, such as endoscopy and motility studies. The clerk is instructed in proctoscopy until he/she has mastered this as a routine procedure. Offered in modules I-XII. Prerequisite: MED 900 or permission of instructor. FLD.

MED 921. Gastroenterology Clerkship--Veterans Administration Medical Center. 4 Hours.
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. FLD.

MED 923. Gastroenterology--Special Programs. 4 Hours.
Combination of the preceding GI electives as desired by the student upon consultation with the senior GI staff. Offered in modules I-XII. Prerequisite: MED 900 and MED 920 or MED 921. FLD.

MED 925. Interdisciplinary Community Partnership. 4 Hours.
This course offers an interdisciplinary eight-week experience in diverse settings outside of the tertiary care environment, dealing with community health issues and their impact on the individual and population health. Students will be engaged in intensive on-site internships with organizations, e.g., social service and public health agencies, community-based indigent-care clinics, which provide services related to disease prevention, health promotion, quality of life, health insurance, poverty prevention, and other healthcare issues. The students will gain insight into the challenges of specific populations within the community, as well as the experiences programs that serve those needs. Direct mentorship will be provided by professionals trained in multiple disciplines, including but not limited to medicine, nursing, allied health, and social work. Students will complete a comprehensive project related to a particular need of the agency and/or the population that the 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 comprehensive written report of their internship experience.

MED 930. Clinical Hematology. 4 Hours.
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. FLD.

MED 935. Infectious Diseases--Advanced Clerkship. 4 Hours.
The students will be given the responsibility of participating actively in the care of patients admitted to the division of infectious diseases under close supervision by attending physicians and house officers. Students will also be exposed to experiences in clinical microbiology as well as medical consultations requested by other clinical services to the division of infectious diseases. Offered in modules I-XII. Prerequisite: MED 900 or permission of instructor. FLD.

MED 936. Infectious Disease Elective at Kansas City Veterans Administration Medical Center. 4 Hours.
The Infectious Disease Section at the VA medical center is responsible for an active inpatient consultation 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. Offered in modules I-XII. Prerequisite: MED 900 or permission of instructor. FLD.

MED 940. Endocrinology and Metabolism, Clinical. 4 Hours.
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. Offered in modules I-XII. Prerequisite: MED 900 or permission of instructor. FLD.

MED 941. Research Problems in Endocrinology and Metabolism. 8 Hours.
Two consecutive four-week modules that will provide the interested student with laboratory and research experience necessary for clinical investigation of specific problems in endocrinology and metabolism. The student may either pursue an independent research problem or participate in a research project currently under investigation by a staff member. The student will be required to submit a written report and deliver a seminar at a Sectional Research Conference. An objective of this course will be to obtain data suitable for publication or presentation at Student Research Day. Offered in modules I-XII. Prerequisite: Special arrangement with staff. IND.

MED 950. Clinical Nephrology-University of Kansas Medical Center or Veterans Administration Medical Center. 4 Hours.
The Division of Nephrology is active in both the University of Kansas Medical Center and the Veterans Administration Medical Center. The activities of this division center on the diagnosis and treatment of patients with medical diseases of the kidney. Clinical clerks are assigned patients on the inpatient service, the outpatient clinic and in the outpatient chronic hemodialysis unit. The clerks are expected to function at an intern level. Under the guidance of the house staff they provide the primary work up, write the admitting orders and assist in performing procedures such as peritoneal dialysis and hemodialysis. Clerks and house staff meet regularly with the attending staff nephrologist to discuss specific topics in renal physiology and pathogenesis. A formal nephrology conference for all housestaff and students is held weekly. The clerk is encouraged
to participate in one of the ongoing research projects. Three positions are available at the University of Kansas Medical Center and two at the Veterans Administration Medical Center. Offered in modules I-XII. Prerequisite: MED 900. FLD.

**MED 951. Research Problems in Basic and Clinical Nephrology. 4-8 Hours.**
Investigation of specific problems in nephrology. One or two modules consecutively. Offered in modules I-XII. Prerequisite: Arrangement with staff. IND.

**MED 960. Pulmonary/Critical Care. 4 Hours.**
Students will be assigned to the Respiratory Intensive Care Unit. Under direct supervision of a Senior Medical Resident and a Pulmonary/Critical Care Fellow they will participate in the care of patients hospitalized in the Respiratory Intensive Care Unit. Daily attending rounds emphasize correlation of clinical, radiographic, laboratory, and invasive physiologic data in managing critically ill patients. Extensive experience in ventilator management and invasive monitoring. Students are on pager contact so they may be notified and participate in critical care decision making. Offered in modules I-XII. Prerequisite: MED 900 or permission of instructor. FLD.

**MED 961. Pulmonary Medicine, Physiology. 4 Hours.**
Students will be assigned to the pulmonary function laboratory to learn the technique and interpretation of pulmonary function tests. Under the immediate supervision of a pulmonary technician and a pulmonary disease fellow, students will observe, perform, and interpret the various tests of lung function. Clinical correlation will be obtained via attendance at inpatient, outpatient, and consultation rounds where clinical problems will be related to physiologic finds. Offered in modules I-XII. Prerequisite: MED 900 or permission of instructor. LAB.

**MED 962. Chest Disease Medicine—Veterans Administration Medical Center. 4 Hours.**
The student electing the Chest Disease Service at the Veterans Administration Medical Center will be assigned as a subintern on Ward 11 West where he or she will be assigned to primary care of a small number of selected chest disease patients. The student will be directly responsible for the patients' diagnostic and therapeutic management under the specific supervision of the chest disease fellow and chief of chest disease section, VA medical center. There will be seminar and didactic instruction on natural history of the frequently occurring chronic chest diseases. The student will assist in procedures such as fiberoptic bronchoscopy, pneumo-thorax intubation, thoracentesis and pleural biopsy and will observe and perform common procedures of pulmonary function testing with patients. He or she will assist with chest disease consultations from other services with the chest disease resident and will be expected to attend and participate in all conferences of the chest disease section. The student will participate in inhalation therapy procedures including ventilator management. He or she will be expected to complete and discuss a small required reading list from selected texts and journal articles. The objective of the elective is to give a student concentrated but comprehensive actual experience in the management of the chest disease performance section of the VA medical center in writing at the completion of the elective. Offered in modules I-XII. Prerequisite: MED 900 or permission of instructor. FLD.

**MED 969. Clinical Oncology—Veterans Administration Medical Center. 4 Hours.**
The student will participate in both in- and outpatient cancer management, consult rounds, and twice-weekly teaching conferences. Emphasis will be on clinical investigations of new and established anticancer drugs, and on the application of pharmacokinetic and cytokinetic studies to the treatment of cancer. Evaluation of the student's general clinical skills and acquisition of knowledge in oncology will include direct observation of clinical performance and conference participation, and a brief objective examination. Offered in modules I-XII. Prerequisite: MED 900. FLD.

**MED 970. Clinical Oncology Clerkship. 4 Hours.**
The student participates actively in the care of the oncology patient on an in- and outpatient basis. This includes consultation rounds. Clinical investigation with both conventional and experimental drugs will be stressed and an opportunity to treat patients by protocols will be given. Offered in modules I-XII. Prerequisite: MED 900 or permission of instructor. FLD.

**MED 971. Advanced Studies in Clinical Oncology. 4 Hours.**
This is an advanced course with emphasis on consultations with attending staff and fellows, investigative protocol studies and special projects, including lectures and conferences. There will be outpatient activity, but no inpatient care. Offered in modules I-XII. Prerequisite: MED 900 and MED 970 or MED 969. FLD.

**MED 972. Palliative Medicine Across the Continuum of Care. 2 Hours.**
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. CLN.

**MED 980. Clinical Allergy, Immunology, and Rheumatology. 4 Hours.**
Students will participate in the weekly KUMC allergy and rheumatology outpatient clinics, as well as assist in subspecialty inpatient consultations. They will perform medical evaluations, select appropriate diagnostic procedures and define specific therapy on assigned patients under the supervision of the staff. They will receive orientation to clinical immunologic tests in current use and be expected to interpret the results of these appropriately. Regular lectures by the staff are given in areas of clinical immunology. With guidance they will choose a topic appropriate for seminar presentation at the end of this clerkship. Offered in modules I-XII. Prerequisite: MED 900 or permission of instructor. FLD.

**MED 981. Advanced Allergy, Immunology, and Rheumatology. 4 Hours.**
The activities outlined in MED 980 will be continued, but the student will have more responsibility for patient evaluation and management. With guidance, another topic will be chosen for seminar presentation at the end of this clerkship. Offered in modules I-XII. Prerequisite: MED 900 and MED 980. FLD.

**MED 982. Research Problems in Allergy, Immunology, and Rheumatology. 4 Hours.**
Three consecutive modules are necessary to give the student adequate time to pursue an independent research problem or a project currently under investigation by a staff member. The student will be required to submit a written report and give a seminar at a division research conference during the final module. Offered in modules I-XII. Prerequisite: Special arrangement with division. FLD.

**MED 990. Geriatric Medicine - Leavenworth Veterans Administration Medical Center. 4 Hours.**
The student will function in the role of a sub-intern, with supervised responsibility for management of patients in a special assessment unit for the elderly, a nursing home, and an outpatient clinic. In addition to daily
teaching rounds, students will participate in seminars covering physiology of aging, altered presentation of illness in the elderly. Evaluation of the student’s performance during the clerkship will be based on faculty’s assessment of the student’s clinical skills and conference participation. Prerequisite: MED 900. FLD.

MED 995. Dermatology. 4 Hours.
This course is composed of outpatient clinic experience, tutorial sessions utilizing audiovisual aids extensively, and inpatient teaching rounds, as well as frequent review 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 such means as oral quizzes and a written examination, but the final appraisal of each student will always be individualized. Offered in modules I-XII. Prerequisite: Medical Basic Sciences. FLD.

MED 996. Research Problems in Dermatology. 4 Hours.
A four-week research elective in which the student undertakes an original investigation in dermatology or participates in an ongoing project, in either case under the direct supervision of a dermatology faculty member. A written report at the end of the module summarizing the student’s findings will be required. Modules I-XII, limited to one student per module. Prerequisite: Medical Basic Sciences and by special arrangement with staff. FLD.

MED 998. Advanced Studies in Geriatric Medicine. 4-12 Hours.
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. RSH.