Internal Medicine (IN_MED)

IN_MED 6002: Medicine Clerkship
Students spend eight weeks on the medicine inpatient service at University Hospital and Harry S. Truman Veterans Hospital where they learn to care for adult patients with acute and chronic illnesses. Teaching emphasizes the principles of differential diagnosis and problem solving as well as the integration of basic science information into the art of patient care. Students also gain clinical experience in medical interviewing and physical examination.

Credit Hours: 8

IN_MED 6012: Rural Medicine Clerkship
Rural Medicine Clerkship
Credit Hours: 8

IN_MED 6022: Springfield Medicine Clerkship
Students learn to care for adult patients with acute and chronic illnesses. Teaching emphasizes the principles of differential diagnosis and problem solving as well as the integration of basic science information into the art of patient care. Students also gain clinical experience in medical interviewing and physical examination.

Credit Hours: 8

Prerequisites: successful completion of the first two years of medical school

IN_MED 6035: SCC Medical Intensive Care
Internists and medical sub-specialists frequently encounter patients with critical conditions that require unique skills. During this rotation medicine students will: 1. Provide assessment, management and follow-up of critically ill patients under the supervision of the medical critical care attending. 2. Be intimately involved in this multidisciplinary approach to patient care. 3. Work collaborative with medical attending physicians, nurses, pharmacists, respiratory therapists and nutritional support staff. 4. Work in a coordinated fashion with consulting physicians and services, social services, physical therapy workers, and the radiology, pathology laboratory departments and chaplain services.

Credit Hours: 5

Prerequisites: Successful completion of 5 of 7 core clerkships, one of which must be IN_MED 6002 or IN_MED 6012 or IN_MED 6022 or IN_MED 6102

IN_MED 6052: Springfield Medical Consultation
The student will work with the Medical Consultation attending faculty. The student will be expected to participate in an interdisciplinary manner with the Rehabilitation physicians as well as the therapy services and other ancillary services caring for the patients. Internists and medical subspecialists frequently encounter patients with critical conditions that require unique skills. During this rotation medicine students will: 1. Provide assessment, management and follow-up of the medical illnesses of patients in a Rehabilitation facility under the supervision of the medical consultation attending. 2. Be intimately involved in this multidisciplinary approach to patient care. 3. Work collaborative with rehabilitation attending physicians, nurses, pharmacists, therapists and other ancillary support staff.

Credit Hours: 5

Prerequisites: Successful completion of the Medicine Clerkship and M-4 Status. M3 students can be considered on an individual basis. Springfield faculty approval needed before registration

IN_MED 6056: Springfield Infectious Diseases
The fourth-year medicine student will work as part of the infectious diseases team providing hands-on clinical services in inpatient and/or consultative settings. Students will participate in daily inpatient rounds, mini-lectures, and clinical case conferences. Students will utilize a variety of evidence-based resources and on-line modules. Infectious diseases faculty are readily available for one-on-one discussion.

Credit Hours: 5

Prerequisites: Successful completion of 5 of the 7 core clerkships, one of which must be Internal Medicine

IN_MED 6062: LINC Internal Medicine Clerkship
A Longitudinal Integrated Clerkship (LINC) includes medical students in patient care over time, allowing enduring learning relationships to develop with patients and physician-teachers. Students will meet required core clinical competencies in multiple disciplines through interleaved, longitudinal experiences over the course of the clinical training year. In contrast to a block curriculum, students meet and follow their patients across multiple settings of care and different disciplines.

Credit Hours: 8

IN_MED 6102: Remediation Medicine Clerkship
Enrolled students are those who received an unsatisfactory grade in a Medicine Clerkship at any Mizzou Med location or site. This course allows them the opportunity to rectify a deficiency.

Credit Hours: 8

Prerequisites: IN_MED 6002 Medicine Clerkship, received unsatisfactory grade

IN_MED 6122: Remediation of Springfield Internal Medicine Clerkship
Students learn to care for adult patients with acute and chronic illnesses. Teaching emphasizes the principles of differential diagnosis and problem solving as well as the integration of basic science information into the art of patient care. Students also gain clinical experience in medical interviewing and physical examination.

Credit Hours: 8

Prerequisites: successful completion of the first two years of medical school

IN_MED 6162: LINC Remediation Internal Medicine Clerkship
Remediation of LINC Medicine Clerkship.

Credit Hours: 8

IN_MED 6182: Remediation of LINC Medicine Clerkship
Remediation of LINC Medicine Clerkship.

Credit Hours: 8

IN_MED 6263: ABS Internal Medicine Research
ABS Internal Medicine Research
Credit Hour: 5-10

IN_MED 6265: ABS IN MED RSCH/REVIEW
ABS in Medicine Research Review
IN_MED 6500: Cardiology Consultation Service
On the inpatient cardiology consultation block, the senior student gains experience in cardiology consultation at either the University Hospital or the Harry S Truman VA Hospital. Through active participation in the consult service the student is provided the opportunity to acquire knowledge of cardiovascular anatomy, physiology, cardiovascular pharmacology, prevention of cardiovascular disease, risk factors for cardiac disease, lipid disorders, chronic coronary artery disease, management and its complications, cardiac arrhythmias and conduction abnormalities, hypertension, valvular heart disease, cardiomyopathy, pericardial disease, pulmonary heart disease, peripheral vascular disease, cerebral vascular disease, adult congenital heart disease, and pre- and post-operative assessment of patients with or without cardiac problems. Students will be evaluated using the standard department student elective evaluation form submitted to the Internal Medicine Education Office. Each faculty working with the student will have the opportunity to contribute to the final grade. The final evaluation will be based on student performance on the cardiology consultation service and active participation in the cardiology conferences. Students’ skills in performing a history and physical exam, the quality of their presentation, the quality of their knowledge base, the quality of their interactions will constitute the basis of grade assignment.

Credit Hours: 5

IN_MED 6507: Endocrinology/Metabolism
The Endocrinology rotation is designed to enable the student to deal with clinical problems in Diabetes endocrinology and metabolism with particular emphasis on the more common problems in an ambulatory setting. During the rotation the student will have the opportunity to see patients with a wide range of endocrine disorders. These patients will be used as the focus for teaching with the emphasis placed on differential diagnosis, pathophysiology, management, and how the disorder affects the patient as a whole. By the end of the rotation the student should be able to evaluate and manage (with supervision) patients with: 1. Diabetes Mellitus 2. Hypoglycemia 3. Thyroid disorders including goiters, thyroid nodules, hyperthyroidism and hypothyroidism 4. Adrenal disorders including adrenal incidentalomas, Cushing and Hyperaldosteronism 5. Pituitary problems including hypopituitarism, conditions due to pituitary hormone excess that including Cushing’s disease, acromegaly and prolactinoma. 6. Calcium abnormalities including hyperparathyroidism, hypoparathyroidism, hypercalcemia, hypocalcaemia and osteoporosis. 7. Polycystic ovarian syndrome. Evaluations: The course grade will be based on students’ skill in performing a history and physical exam, the quality of the presentation, the quality of their knowledge base and the quality of their interactions.

Credit Hours: 5

IN_MED 6508: General Internal Medicine Outpatient
General Internal Medicine Outpatient

Credit Hours: 5

IN_MED 6513: Infectious Diseases
The goals of the Infectious Diseases elective will be to: 1. Teach the student how to be an effective consultant. 2. Assist the student in his/her knowledge of disease processes. 3. Help the student improve his/her history taking and physical examination skills. 4. Enhance the student’s knowledge regarding the use of antimicrobial agents. 5. Improve the student’s understanding of the diagnosis and management of commonly-encountered infectious diseases with attention to the use of the history and readily available laboratory tests.

Credit Hours: 5

IN_MED 6515: Problems in Medical Ethics
Problems in Medical Ethics

Credit Hours: 5

IN_MED 6518: Springfield Cardiovascular Medicine Service
The cardiovascular medicine service is designed to allow students to have exposure to an overview in the diagnosis and management of hospitalized patients with cardiac disease processes, encompassing coronary artery disease, structural heart disease, and electrophysiology.

Credit Hours: 5

Prerequisites: Successful completion of IM clerkship

IN_MED 6580: Coronary Care Unit
During the Coronary Intensive Care Unit rotation, the medical student is provided the opportunity to acquire knowledge in the evaluation and management of acute and chronic coronary artery disease, life threatening cardiac arrhythmia’s, acute severe congestive heart failure, acute valvular disease, acute infective endocarditis, hypertensive emergencies, cardiac tamponade, aortic dissection, aortic pulmonary embolism, life threatening complications of cardiac therapy, hypotension, and shock. The Coronary Intensive Care rotation allows the student to evaluate and treat these patients in close conjunction with medical residents, cardiology fellows and cardiology faculty. Students will be evaluated using the standard Department student elective evaluation form submitted to the Internal Medicine Education Office. Each faculty working with the student will have the opportunity to contribute to the final grade. The final evaluation will be based on student performance on the cardiology consultation service and active participation in the cardiology conferences. Students’ skills in performing a history and physical exam, the quality of their presentation, the quality of their knowledge base, the quality of their interactions will constitute the basis of grade assignment.

Credit Hours: 5

IN_MED 6801: Diabetes Mellitus Externship
Diabetes Mellitus Externship

Credit Hours: 5

IN_MED 6802: Gastroenterology
Medical students will be assigned to the inpatient GI consultation service, where they will see and evaluate patients, read about their problems, and present them to the GI fellow and/or teaching attending. They should attend all endoscopic procedures on the patients they follow on the inpatient service. They should also attend a sampling of outpatient procedures each week in the Endoscopy Center. As time permits, they may be assigned to one or more GI clinics during the rotation as well. Medical students will be expected to attend all GI conferences during the rotation. Students are also encouraged to attend Internal Medicine Grand Rounds and Internal Medicine Morning Report. They may also be assigned to give one formal presentation during their rotation. It is
recommended that they read the entire GI-Liver section of the Internal Medicine textbook that they used on their third-year Internal Medicine Clerkship. Ongoing feedback is provided to the student during the rotation. At the end of the rotation, a formal written evaluation will be prepared by the inpatient attending, in conjunction with the GI fellow with whom the resident/medical student worked with. Conference participation is factored in.

Credit Hours: 5

IN_MED 6803: Subinternship in Internal Medicine
The internal medicine subinternship builds on the skills begun during the internal medicine clerkship and prepares the student for the internship year. 1. Students will refine and further develop skills in: a. Physical exam, history taking, chart review, and written notes; b. Problem list development and management plan; data interpretation and synthesis; c. Oral presentation; d. Interpersonal relations with patients, families, staff and peers; e. Time management. I. Self-directed learning. II. Evidence-based medicine. 2. Expand knowledge base in general internal medicine. 3. Assume primary responsibility for inpatient care. 4. Further develop in the role of primary care giver. Patient management skills, medical record keeping, presentation skills, knowledge base, and ability to handle responsibility will be carefully observed by both the senior ward resident and the attending physician. Students will receive constructive feedback/suggestions for improvement throughout the rotation from both the attending and the senior ward resident. The attending, with input from the senior ward resident and the third year students, will report the final scores using the Department of Internal Medicine standard electives evaluation form. Students will meet with the attending physician at the end of the block to discuss their performance. Students will not receive elective credit for three weeks rotations.

Credit Hours: 5

IN_MED 6805: Hematology and Medical Oncology Chronic Care
The specific objective of the course is to assist the student in developing a greater understanding for the care of chronically ill patients with hematologic and neoplastic diseases. The student’s evaluation is based predominantly on his/her performance in presentation and in written chart notes of patients under the student’s care. This evaluation will be by the attending physician with whom the student has worked. The standard department student elective evaluation form will be used to document student performance.

Credit Hours: 5

IN_MED 6806: Immunology/Rheumatology
The overall curricular objectives of this elective include: 1. Basic Information. The student should be able to: a. Perform a medical history and screening physical examination with attention to symptoms and signs of rheumatic disease. b. Understand the basic pathophysiology and clinical diagnosis of common arthritic and musculoskeletal diseases in adults. c. Understand the natural history of rheumatic diseases, particularly rheumatoid arthritis, soft tissue rheumatism, degenerative joint disease, systemic lupus erythematosus and spondyloarthropathies. d. Understand the short and long term management of rheumatic conditions and apply these principles together with overall clinical judgment in the management of individual patients. These therapeutic measures include: 1. drug therapy, 2. physical rehabilitative measures, and 3. surgical intervention. e. Formulate ways to approach the emotional problems of patients with chronic disease. f. Understand the value of the comprehensive approach in arthritis treatment including patient education, the role of the allied health professional and community resources.

Credit Hours: 5

IN_MED 6807: Medical Intensive Care
Under the supervision of the medical critical care attending, the medical students are part of a team providing assessment, management, and follow-up of critically ill patients. Students will be intimately involved in this multidisciplinary approach to patient care. As a member of the ICU patient management team, the student will work collaboratively with residents, fellows, medical attendings, nurses, pharmacists, respiratory therapists and the nutritional support staff. The team will work in a coordinated fashion with consulting physicians and services, social services, physical therapy workers, and the radiology and pathology laboratory departments, and chaplain services.

Credit Hours: 5

IN_MED 6808: Nephrology Advanced Elective
This elective builds on the knowledge and skills students have acquired in the third year course in Internal Medicine. Students will have the opportunity to perform histories and physically, participate in the decision-making process of patient management, and be responsible for daily follow-up in patients with fluid and electrolyte problems, acid-base disturbances, acute and chronic renal failure and a variety of renal diseases. The focus in these areas will be at a much higher level of responsibility and management than in the third-year course.

Credit Hours: 5

IN_MED 6809: Pulmonary Medicine Diagnostic Services
The Pulmonary Medicine Service is designed to allow students to participate in the diagnosis and care of hospitalized patients with an acute pulmonary problem as well as continuity follow up of existing known disease processes. This service evaluates and assists in management of adult patients at the University or VA Medical Centers. Either rotation includes intensive care unit patients with primary surgical or cardiac diagnoses, the rotation at the VA Medical Center also includes intensive care unit patients with primary medical diagnoses. The rotation will introduce the student to major clinical entities including the diagnosis and management of infectious lung disorders, neoplasms of the lungs, chronic obstructive pulmonary disease, asthma, acute respiratory failure, occupational pulmonary disease and interstitial lung disorders. The student will be introduced to the variety of diagnostic tests including radiographic studies, fiberoptic bronchoscopy, pulmonary function testing, cardiopulmonary exercise testing, surgical lung biopsy, thoracentesis and pleural biopsy, and arterial blood sampling. Students also participate in consultation on patients requiring outpatient pulmonary clinic evaluation. Each student is encouraged to spend extra time in the pulmonary function lab, and have pulmonary function tests and cardiopulmonary exercise tests done on themselves, depending on available time. Each student rotating through the pulmonary service will be expected to evaluate and present patients fully on a daily basis to the pulmonary consult team, including the attending physician. The student will have an opportunity to assist fellows and faculty with procedures such as bronchoscopy and thoracentesis. Students will have the opportunity to interpret pulmonary function tests, chest radiographs and other radiographic studies such as computed tomography and nuclear medicine studies of the thorax.
Credit Hours: 5

**IN_MED 6812: Springfield General Internal Medicine Outpatient**
The fourth-year student on general medicine outpatient rotation will work with a general medicine attending seeing patients in a general medicine outpatient clinic. Students will see patients in clinic, perform the H&P, and develop an assessment and plan for these patients on their own. They will then discuss with the general internal medicine physician and see the patient together. The student will develop quality improvement tools during the block as well, through mini QI discussions with faculty. The student will be expected to write one to two clinic notes per session to improve their documentation skills.

Credit Hours: 5

**Prerequisites:** Successful completion of Medicine clerkship. M4 status

---

**IN_MED 6813: Springfield Cardiology Consult Service 4-week**
Students will be provided the opportunity to enhance their knowledge of CV anatomy, CV physiology, and CV pharmacology. In addition, students will gain knowledge and experience in the evaluation and management of CV disease including acute and chronic coronary artery disease, cardiomyopathies, valvular heart disease, pericardial disease, adult congenital heart disease, hypertension and hypertensive cardiovascular disease, cardiac arrhythmias and conduction disturbances, pulmonary heart disease, peripheral vascular disease, heart failure, hypotension, and shock. Students will develop skills to evaluate patients with a variety of CV symptoms including chest pain, dyspnea, palpitations, syncope and pre-syncope, edema, and palpitations. Students will also learn how to provide pre-operative CV consultation and perioperative CV management. These skills will enhance their ability to evaluate and manage patients with CV disease regardless of their eventual clinical specialty.

Credit Hours: 5

**Prerequisites:** Successful completion of IM clerkship

---

**IN_MED 6902: SCC Cardiac Electrophysiology Two Week**
The student will work as part of a team providing hands-on clinical services in both the inpatient and outpatient settings in a consultative manner. Students will learn using a variety of evidence-based resources, didactic teaching, demonstration, and observation. This is intended as an introductory experience in the specialty of Cardiac Electrophysiology.

Credit Hours: 2

**Prerequisites:** Completion of the first two years of medical school

---

**IN_MED 6904: SCC Hematology/Oncology Two Week**
This is intended as an introductory experience in the specialty of Hematology/Oncology. Students will learn how to integrate previously acquired knowledge and concepts as well as develop a greater understanding for the care of patients with hematologic and neoplastic disease. The student will work as part of a team providing hands-on clinical services in an inpatient, clinic, and consultative setting. Students will learn using a variety of evidence-based resources, didactic teaching, demonstration and observation.

Credit Hours: 2

**Prerequisites:** Successful completion of the first two years of medical school

---

**IN_MED 6911: Cardiology Procedure Service**
The Cardiology Procedure Service is designed to allow students to participate in the cardiology procedures involved in the diagnosis and care of hospitalized patients with an acute cardiac problem as well as continuity follow up of existing known disease processes. Sterile technique will be taught by the attending and students will demonstrate competence with sterile technique.

Credit Hours: 2

**Prerequisites:** Successful completion of the first two years of medical school

---

**IN_MED 6914: Pulmonary Medicine Procedure Service**
The Pulmonary Medicine Procedure Service is designed to allow students to participate in the pulmonary procedures involved in the diagnosis and care of hospitalized patients with an acute pulmonary problem as well as continuity follow up of existing known disease processes. Sterile technique will be taught by the attending and students will demonstrate competence with sterile technique.

Credit Hours: 2

**Prerequisites:** Successful completion of the first two years of medical school