

# MEDICINE CLINICAL (MEDI)

---

## **MEDI G700 - Internal Medicine Clerkship (8 Credits)**

During the Internal Medicine Clerkship, students will gain exposure to both the inpatient and outpatient practice of Internal Medicine. The rotation is designed to help develop the student's clinical skills and to direct his or her approach to patient care towards a problem-oriented frame. Also, through active participation, the student should observe the diagnostic process as it unfolds and develop his/her own method of evaluating clinical problems. During the inpatient portion of the clerkship, patients admitted to the hospital are assigned to the students for history taking and physical examination. Students then participate in diagnostic and therapeutic decisions concerning their patients and follow them throughout their hospital stay. Students are responsible for daily notes and orders under the supervision of the residents and the attending physician on the service. Students on the Internal Medicine Clerkship will also participate in one week of outpatient/ambulatory care at regional Internal Medicine practices. Formal didactic sessions are offered frequently throughout the IM Clerkship, which include formal lectures and case studies specifically for third-year medical students as well as the Department of Medicine's noon-time conferences and grand rounds presentations. During their time with the inpatient wards team, students will also actively participate in daily morning rounds. Weekend work hours are included during the inpatient portion of the clerkship; other weeks are typically confined to weekdays. The conclusion of the clerkship will include assessments via the Internal Medicine NBME subject examination and an Objective Structured Clinical Evaluation (OSCE).

## **MEDI G701 - Clerkship Completion (0 Credits)**

This course allows completion of required M-III Clerkships where normal enrollment for those courses crosses academic years. It is valued at zero credits to reflect enrollment, but all graded material is taken into account in the G700 clerkship grade. Successful completion of required hours results in a passing grade.

## **MEDI G710 - Outpatient Cardiology (2 Credits)**

Students are assigned to work one on one with a cardiologist in a private office setting. Depending on comfort level of students and supervising attending cardiologist, the student may be expected to independently perform history and physical exam and then present the patient to the attending cardiologist. Other patients will be observed with the attending cardiologist present. There will be review sessions with an attending to review all interpretations of EKGs. At these sessions, students receive ongoing instruction in electrocardiography, as well as reading assignments. Other graphics, included M Mode echocardiography, 2-D echocardiography, and phonoechocardiography, color Doppler and angiograms are also included to a lesser degree.

## **MEDI G715 - Pulmonology Teaching Service Elective (2 Credits)**

This elective is designed to give students exposure to the evaluation and management of patients with pulmonary disease. Emphasis is placed on differential diagnosis of various clinical and radiologic problems in pulmonary disease. The use and interpretation of pulmonary function tests as well as the role of bronchoscopic and other diagnostic procedures will be reviewed. Students will have the opportunity to observe bronchoscopy.

## **MEDI G720 - Internal Medicine Critical Care Elective (2 Credits)**

This elective presents students the opportunity to manage critically ill patients in the Intensive Care Unit. Together with their teams, students take in-house overnight call every fifth night, usually admitting 2-3 new patients each call night with maximum census of 6-8 patients for ongoing care. Patient load may be adjusted as needed based on student comfort and patient complexity. Students evaluate all assigned patients, completing and recording the medical interview, physical examination, diagnostic assessment, and management plan. Students reevaluate their impressions on daily rounds and in teaching conferences with the Pulmonary/Critical Care faculty. Students will also have the opportunity to observe bronchoscopy.

## **MEDI G725 - Infectious Disease Elective (2 Credits)**

This course is offered as a consultative rotation in clinical Infectious Disease. Students are assigned to work with the attendings and usually one PGYII or III Internal Medicine resident as related to hospitalized and ambulatory patients. The student will be responsible for first patient contact with patients referred to the Infectious Disease consult service. These patients will then be presented to the resident and the faculty. The student will be responsible for recording the history, physical and orders with countersignature by the resident and faculty. There is a biweekly Infectious Disease clinic which the student will also be expected to attend.

## **MEDI G730 - Hematology/Oncology Elective (2 Credits)**

Student will be paired with preceptors in a busy consultative hematology/oncology practice involving inpatient and outpatient diagnosis and treatment. Patients with hematological neoplasms, immunohematological problems including blood banking problems, clotting difficulties, various cytoses and cytopenias, and patients undergoing plasmapheresis for a variety of disorders are evaluated and discussed. The student will also be exposed to and be involved in various aspects related to all stages in the diagnoses and management of malignant disorders. The student can expect to attend daily Internal Medicine conferences. At the conclusion of the rotation, the student should be able to reasonably approach a patient with various cytopenias, clotting disorders and hematological neoplasms as well as solid tumors.

## **MEDI G735 - Nephrology Elective (2 Credits)**

The medical student will round daily with the attending physician; all aspects of nephrology and hypertension will be discussed. Acid base electrolytes, water metabolism and other subjects of interest will be discussed daily by the attending. The format of these discussions will be on a one-to-one basis with preassigned topics. The student will be in inpatient and outpatient settings, where under supervision, they will be able to examine urinary sediments. The student will evaluate both inpatients on various specialty services and outpatients on the Nephrology Consultation Service. The student will present and discuss these patients with staff attending nephrologists and be guided to the appropriate reading on topics related to these patients.

## **MEDI G740 - Gastroenterology and Hepatology Elective (2 Credits)**

The Gastroenterology and Hepatology medical student elective will involve the student seeing general GI and liver patients in an outpatient setting and also watching endoscopic procedures (EGD, colonoscopy, etc) performed by a gastroenterologist. The student may have additional involvement in inpatient consults.

**MEDI G745 - Geriatrics Elective (2 Credits)**

The Geriatrics and Palliative Medicine elective is designed to help the student expand on prior experiences to advance knowledge of common Geriatrics Syndromes and improve skills in Geriatric patient assessment. The student will have the opportunity to engage in patient care in a variety of settings including acute care, outpatient care and long term care facilities with a focus on frail elderly patients. By the end of the rotation, the student will be required to demonstrate skills in functional, cognitive and social assessment. We Encourage opportunities for student research and participation in program development.

**MEDI G750 - Rheumatology Elective (2 Credits)**

This elective rotation is designed to provide students with an overview into rheumatic diseases such as various arthritides and connective tissue disorders. Diseases include, but are not limited to, rheumatoid arthritis, psoriatic arthritis, gout, osteoarthritis, lupus, scleroderma, vasculitis, inflammatory myositis. The student will observe, in an outpatient clinic setting, the stepwise approach into diagnosis and treatment of rheumatic disease. Emphasis will be placed on learning the basics of a musculoskeletal history and pertinent physical examination findings.

**MEDI G755 - Dermatology Elective (2 Credits)**

Second year medical students may choose to spend two weeks in a private dermatology office. The student will be assigned to follow a specific dermatologist in the group which may change on various week days, but the rotation consists of full days, Monday through Friday. When there is a GHS Dermatology Clinic, the student should be in attendance at that clinic rather than in the private office. Each student will follow their assigned dermatologist as he/she sees patients throughout the day. They will be expected to read about various dermatologic conditions observed during these times. Dermatology text books, journals and other reference materials will be made available. Students may be allowed to assist with minor surgeries and procedures. In addition to following the dermatologist, a core curriculum will be provided to familiarize the students with basic dermatologic terms and common dermatoses.

**MEDI G760 - Community Private Practice Elective (2 Credits)**

Introduction to community based primary care Internal Medicine including preventative medicine, chronic disease management and acute urgent care in an ambulatory setting.

**MEDI G775 - Radiation Oncology Elective (2 Credits)**

This elective is designed to acquaint the student with the practice of radiotherapy and fundamental basic science concepts that guide radiation oncologists in their clinical practice of medicine. An emphasis will be placed on clinical examination, review of radiology images and a general understanding of cancer particularly the indications and delivery of radiation therapy. The primary emphasis of the rotation will focus on issues that will be useful to any physician who may provide care for patients with a cancer diagnosis or patients with a personal history of cancer. While students may decide to pursue further training in this specialty after taking this elective, any student who already plans to pursue residency training in Radiation Oncology should contact the course director or another faculty member as early as possible in their medical education to express and further explore their interest given the highly competitive nature of matching in a radiation oncology residency program. Track 1: University-based Elective: This track is only offered in Greenville and is appropriate for all medical students especially for those students who expect to practice medicine in a university based system or intend to train in an oncologic sub-specialty of internal medicine, pediatrics, gynecology or surgery. Students performing this track can expect to attend a larger variety of multi-disciplinary conferences (e.g., Breast Cancer MDC Conference, Thoracic Oncology MDC, GI-Oncology and Melanoma MDC, Neuro-Oncology MDC, etc.) in addition to the weekly Cancer Conference/Tumor Board at GMH. Students in this track will work with a variety of staff physicians during their rotation. Track 2: Community-based Elective: The track is designed for students who wish to experience a broad overview of clinical radiation oncology practiced in the community setting. Elective sites for this track include either the GHS Cancer Institute's Spartanburg or Seneca office locations depending on the student's preference. The student will spend the elective working in radiation oncology seeing patients, performing simulation and treatment planning, and attending multidisciplinary conferences and tumor boards. Exposure to patients with many different types of cancer routinely treated in a community setting will be common during this elective. Students who select this track at the Spartanburg office would work primarily with Dr. Howes while those students who perform this rotation in Seneca would expect to work primarily with Dr. O'Connell.

**MEDI G780 - Team-Based Primary Care Health (2 Credits)**

This course provides opportunities to develop knowledge and skills in the comprehensive care of patients and their families who have traditionally had gaps in medical care and as an introduction to team based primary care. Students will identify challenges in care for adult patients who are in the uninsured, underinsured or Medicare/Medicaid population. Communication skills, shared decision-making, care coordination, family support interventions and management of acute and chronic medical conditions will be emphasized. The course will include time with members of the interdisciplinary team (pharmacy techs, dieticians, behavioral health providers, social workers, diabetic educators, financial counselor/Medicaid worker, as well as primary and subspecialty physicians and nurses). Students will engage in assessment, management recommendations for, and follow-up of patients, as well as a range of activities examining the clinical, ethical and research aspects of comprehensive care with efforts to overcome identified challenges. Requirements: Grand Rounds each Friday morning, and Case Management Component. For Case: Students will be required to pick one patient within the first 3 days of the elective to follow for a chronic illness. Required interaction will include a follow-up visit either in-person or by telephone at some point throughout the 2-week elective. A written summary of the case should be submitted to the Course Director by the last Friday of the Elective outlining how objectives of the course were met. (see canvas for further instructions).

**MEDI G785 - Adult Palliative Care Elective (2 Credits)**

This course provides opportunities to develop knowledge and skills in the comprehensive care of patients and their families during various stages of life-limiting illness. Students will be partnered with the palliative care team in the inpatient setting. Students will identify periods of transition in illness, as well as appropriate interventions. Communication skills, decision-making, care coordination, family support interventions and management of symptoms will be emphasized. The course will include didactic and clinical time with members of the interdisciplinary team (nursing, social work, chaplaincy, therapies). Students will engage in assessment, management recommendations for, and follow-up of patients, as well as a range of activities examining the clinical, ethical and research aspects of comprehensive palliative and end-of-life care.

**MEDI G790 - Inpatient Cardiology Elective (2 Credits)**

Students are assigned to work on the inpatient Cardiology Teaching Service at GMH. The Cardiology Teaching Service consists of medical students (M3 and/or M4), IM residents and an attending cardiologist. The student will be expected to complete history and physicals for new consultations and follow-up visits for existing patients. The student will be expected to follow 1-2 patients at the beginning of the elective and up to 5 patients by the end of the elective. They will be presenting patients during teaching rounds to the attending cardiologist. Common conditions that may be presented include, but are not limited to: NSTEMI, STEMI, CHF, arrhythmias (including AF, atrial flutter, VT/VF).

**MEDI G800 - Medicine Inpatient (MTS) Acting Internship (4 Credits)**

Students are assigned to an inpatient general medicine team, composed of one attending physician, one PGY-2 or PGY-3 resident, one to two PGY-1 residents, and at times third-year medical student(s). Acting interns care for patients as their primary caregivers, under the direct supervision of the upper level resident. Together with their teams, acting interns take in-house call every sixth night, admitting patients with all types of medical illnesses. Acting interns usually admit 2 to 3 new patients each call night, with a maximum census of 6 to 8 patients for ongoing care. Patient load may be adjusted as needed based on student comfort and patient complexity. Acting interns evaluate all assigned patients, completing and recording the medical interview, physical examination, diagnostic assessment, and management plan. Acting interns reevaluate their patients daily, reassessing their diagnoses and therapeutic plans. Acting interns present their patients and discuss their impressions on daily rounds and in teaching conferences with the Internal Medicine residents and faculty. Acting interns learn to interpret laboratory data, chest x-rays and electrocardiograms and to perform procedures, which usually include central line placement, lumbar puncture, paracentesis, stress testing and thoracentesis. Clinical learning is supplemented by self-directed reading and required conferences. Conferences include informal discussions, lectures, grand rounds and bedside rounds. Acting interns take in-house overnight call with their team every sixth night and receive one day free of patient care duties per week.

**MEDI G801 - Hospitalist Acting Internship (2-4 Credits)**

This elective provides an opportunity for fourth year medical students to work in close relationship with a currently practicing internal medicine hospitalist. The students will have the opportunity to care for ICU and floor patients while following the schedule of a hospitalist, and subsequently gain insight on the typical work life for internal medicine hospitalists. Students are assigned to a hospitalist each week. Acting interns care for patients as their primary caregivers, under the direct supervision of the attending. The acting intern will take in-house call and respond to rapid responses and codes per the attending's schedule; they will admit patients with varying medical illnesses. Acting interns should admit 2-3 new patients per call day/night, with a maximum census of 6-8 patients for ongoing care. This patient load may be adjusted based on student comfort and patient complexity. Acting interns evaluate all assigned patients, completing and documenting the medical interview, physical exam, diagnostic assessment, and management plan. Acting interns re-evaluate their patients daily, reassessing their diagnoses and therapeutic plans. They will present their patients and discuss their impressions on daily rounds with their attending. Acting interns learn to interpret laboratory data, chest x-rays, and electrocardiograms and to perform procedures such as central line placement, lumbar puncture, paracentesis, stress testing, and thoracentesis based on patient need and attending comfort. Clinical learning is supplemented by self-directed reading and required conferences. Acting interns will follow the schedule of their assigned attending Monday – Friday from 7am – 7pm and will be free of patient care duties Saturday and Sunday. This elective is intended to be 2 weeks, combined with the 2 week critical care elective; however, it can also be scheduled as a 4 week elective.

**MEDI G810 - Community Private Practice Elective (2-4 Credits)**

Students are assigned to a general medicine office, where they act as primary caregivers for their patients under the direct supervision of a faculty physician. Students provide comprehensive care for patients in all stages of illness, including initial diagnosis of disease, chronic management of established medical problems, acute management of decompensated chronic disease, and follow-up after hospitalization.

Students evaluate 8-10 patients everyday, completing and recording the medical interview, physical examination, diagnostic assessment, and management plan. Students present their patients and discuss their impressions in teaching conferences with the attending physician. Conferences include informal discussions, lectures, and grand rounds.

**MEDI G815 - Cardiology Elective (2 Credits)**

Students are assigned to work with a specific group of cardiologists.

Students will be assigned specific patients to examine and follow hospitalized and ambulatory patients. It shall be the student's responsibility to record a history and physical examination on each assigned patient. History and physical findings will be presented to the attendings on rounds. Students will participate in rounds each day. There is an opportunity to observe procedures done on patients in the unit which include pacemaker insertion, cardioversion, hemodynamic monitoring, coronary angiography, and stress testing. The 20 bed Coronary Care Unit and 34 bed post-CCU offer excellent updated physical facilities for this experience. The Cardiac Clinic meets once each week and provides an opportunity to review the history and physical findings on a variety of cardiovascular problems. Considerable emphasis is placed on instruction and interpretation of electrocardiograms. The student is responsible for interpreting an average of 10 records a day. There will be a review session each day with one attending to review all interpretations of EKGs. At these sessions, students receive ongoing instruction in electrocardiography, as well as reading assignments. Other graphics, included M Mode echocardiography, 2-D echocardiography, and phonoechocardiography, color Doppler and angiograms are also included to a lesser degree.

**MEDI G820 - Hematology/Oncology Elective (2 Credits)**

Student will be paired with preceptors in a busy consultative hematology/oncology practice involving inpatient and outpatient diagnosis and treatment. Patients with hematological neoplasms, immunohematological problems including blood banking problems, clotting difficulties, various cytoses and cytopenias, and patients undergoing plasmapheresis for a variety of disorders are evaluated and discussed. The student will also be exposed to and be involved in various aspects related to all stages in the diagnoses and management of malignant disorders. The student can expect to attend daily Internal Medicine conferences. At the conclusion of the rotation, the student should be able to reasonably approach a patient with various cytopenias, clotting disorders and hematological neoplasms as well as solid tumors.

**MEDI G825 - Infectious Disease Elective (2 Credits)**

This course is offered as a consultative rotation in clinical Infectious Disease. Students are assigned to work with the attendings and usually one PGYII or III Internal Medicine resident as related to hospitalized and ambulatory patients. The student will be responsible for first patient contact with patients referred to the Infectious Disease consult service. These patients will then be presented to the resident and the faculty. The student will be responsible for recording the history, physical and orders with countersignature by the resident and faculty. There is a biweekly Infectious Disease clinic which the student will also be expected to attend. At the end of this rotation the student should be able to discuss and understand the appropriate use of antibiotic therapy. They should be able to understand the common entities in Infectious Disease such as FUO, hepatitis, STD, septicemia, osteomyelitis, endocarditis, AIDS, postoperative wound infections, etc.

**MEDI G830 - Medicine Critical Care (2 Credits)**

Manage critically ill patients in the Intensive Care Unit. Together with their teams, students take in-house overnight call every fifth night, usually admitting 2-3 new patients each call night with maximum census of 6-8 patients for ongoing care. Patient load may be adjusted as needed based on student comfort and patient complexity. Students evaluate all assigned patients, completing and recording the medical interview, physical examination, diagnostic assessment, and management plan.

Students reevaluate their impressions on daily rounds and in teaching conferences with the Pulmonary/Critical Care faculty. Students learn to interpret sputum samples, chest x-rays, arterial blood gases, and tests of ventilation and gas exchanges. Students learn to perform diagnostic and therapeutic procedures, which include thoracentesis, central line placement, arterial line placement, intubation, ventilator management. Students will also have the opportunity to observe bronchoscopy.

**MEDI G835 - Nephrology Elective (2 Credits)**

The medical student will round daily with the attending physician; all aspects of nephrology and hypertension will be discussed. Acid base electrolytes, water metabolism and other subjects of interest will be discussed daily by the attending. These would take the format of discussion on a one-to-one basis with preassigned topics. The student will be in inpatient and outpatient settings, where under supervision, they will be able to examine urinary sediments. Reprints on topics discussed will be distributed; adequate time will be provided for the student to prepare the topic.

**MEDI G840 - Rheumatology Elective (2 Credits)**

This elective rotation is designed to provide students with an overview into rheumatic diseases such as various arthritides and connective tissue disorders. Diseases include, but are not limited to, rheumatoid arthritis, psoriatic arthritis, gout, osteoarthritis, lupus, scleroderma, vasculitis, inflammatory myositis. The student will observe, in an outpatient clinic setting, the stepwise approach into diagnosis and treatment of rheumatic disease. Emphasis will be placed on learning the basics of a musculoskeletal history and pertinent physical examination findings.

**MEDI G845 - Pulmonary Teaching Service Elective (2 Credits)**

Prescribe respiratory therapy for hospitalized and ambulatory patients; interpret tests of ventilation and gas exchange; examine and interpret stained sputum for bacteriology; examine and interpret unstained sputum for nonmalignant cytology; perform diagnostic procedures including thoracentesis and pleural biopsy; students will also have the opportunity to observe bronchoscopy.

**MEDI G850 - Dermatology Elective (2 Credits)**

Fourth year medical student may choose to spend two weeks in a private dermatology office. The student will be assigned to follow a specific dermatologist in the group which may change on various week days, but the rotation consists of full days, Monday through Friday. When there is a GHS Dermatology Clinic, the student may attend at that clinic rather than in the private office. Each student will follow their assigned dermatologist as he/she sees patients throughout the day. They will be expected to read about various dermatologic conditions observed during these times. Dermatology text books, journals and other reference materials will be made available. Students may be allowed to assist with minor surgeries and procedures. In addition to following the dermatologist, a core curriculum will be provided to familiarize the students with basic dermatologic terms and common dermatoses.

**MEDI G855 - Gastroenterology and Hepatology Elective (2 Credits)**

The Gastroenterology and Hepatology medical student elective will involve the student seeing general GI and liver patients in an outpatient setting and also watching endoscopic procedures (EGD, colonoscopy, etc) performed by a gastroenterologist. The student may have additional involvement in inpatient consults.

**MEDI G865 - Endocrinology Elective (2 Credits)**

The endocrine elective will expose the student to a comprehensive spectrum of endocrine conditions, including type 1 and type 2 diabetes and their complications, thyroid disorders, conditions affecting both male and female reproduction, obesity, adrenal and pituitary gland disease, neuroendocrine tumors and their associated syndromes, and conditions involving bone and calcium metabolism. The lecture will be primarily outpatient with some inpatient consultations.

**MEDI G870 - Medicine-Pediatrics Community Practice (2 Credits)**

The focus of this elective is for the medical student to gain exposure to the practice of Internal Medicine and Pediatrics in a community setting. Students will perform well child and adolescent care and well as adult preventative medicine. Students participate in initial diagnosis of disease, chronic management of established medical problems, acute management of decompensated chronic disease, and followup after hospitalization. Students evaluate patients every day, completing and recording the medical interview, physical examination, diagnostic assessment, and management plan. Students present their patients and discuss their impressions with the attending physician. The goal of this elective is for the medical student to have not only an overview of combined Internal Medicine and Pediatrics practice but also to have an understanding of the challenges and rewards that come with providing comprehensive medical care for patients.

**MEDI G875 - Radiation Oncology Elective (2-4 Credits)**

CL:2020.

**MEDI G885 - Geriatrics Elective (2 Credits)**

The Geriatrics elective is designed to help the student expand on prior experiences to advance knowledge of common Geriatrics Syndromes and improve skills in Geriatric patient assessment. The student will have the opportunity to engage in patient care in variety of settings including acute care, outpatient care and long term care facilities with a focus on frail elderly patients. By the end of the rotation, the student will be required to demonstrate skills in functional, cognitive and social assessment.

**MEDI G890 - Advanced Physical Exam Series (2 Credits)**

The Advanced Physical Exam Skills course is a 2-4 week workshop offered to fourth-year medical students who are interested in developing a deeper understanding of how to use the physical exam to influence medical decision making. The course combines interactive lectures, physical exam rounds, materials for personal study, and a final assessment. The lectures focus on learning the pathophysiology, diagnostic characteristics, and clinical significance of different exam maneuvers. The physical exam rounds allow for immediate skills practice. Special lectures focus on diagnostic error and how to analyze literature about diagnostics. Articles pertinent to the topics are distributed prior to lectures. A pre-and-post assessment will be given to measure improvement in knowledge and mastery of concepts.

**MEDI G895 - Adult Palliative Care Elective (2 Credits)**

This course provides opportunities to develop knowledge and skills in the comprehensive care of patients and their families during various stages of life-limiting illness. Students will identify periods of transition in illness, as well as appropriate interventions. Communication skills, decision-making, care coordination, family support interventions and management of symptoms will be emphasized. The course will include didactic and clinical time with members of the interdisciplinary team (nursing, social work, chaplaincy, therapies). Students will engage in assessment, management recommendations for, and follow-up of patients, as well as a range of activities examining the clinical, ethical and research aspects of comprehensive palliative and end-of-life care.

**MEDI G899 - Internal Medicine Away Rotation (4 Credits)**

The student will complete an intensive study of Internal Medicine at another hospital or practice. This course must be approved through the VSAS application service or office of the M3/M4 Director.