

COURSE DESCRIPTIONS - MD

Course descriptions are organized by the MD degree course subject. To skip to course descriptions for a specific subject, select from one below. Course descriptions in school catalogs and the Course Search (<https://catalog.uth.edu/course-search/>) are correct at the time of publication. See [myUTH \(https://uthidp.uth.edu/nidp/sam12/ssso/?id=Campus-Affiliate-LOA2-DUO&sid=0&option=credential&sid=0\)](https://uthidp.uth.edu/nidp/sam12/ssso/?id=Campus-Affiliate-LOA2-DUO&sid=0&option=credential&sid=0) for more recent course information and to register for courses.

Ambulatory Medicine (AMB)

AMB 4000 Required Ambulatory Medicine

The required fourth-year ambulatory rotation is an outpatient clinic-based selective, allowing students to choose a particular area of focus consistent with their career trajectory. Students are able to request an ambulatory experience in emergency medicine, family medicine, internal medicine, obstetrics-gynecology, or pediatrics. Students will care for patients coming in for preventative health checkups and those with minor acute illnesses. Students also revisit the principles of evidence-based medicine and complete a critical literature review for a clinical question of their choosing. Fail Thru Honors(MED)

Biological Sciences (BSCI)

BSCI 1100 Foundations of Medical Science P/F

The purpose of this module is to provide students with the fundamentals necessary to study human disease at an advanced level. Students will learn the basic structure and function of major organs at the same time as they practice the related physical exam and clinical skills in Doctoring. In addition, students will learn the basic biochemical, cellular, and physiological mechanisms that underlie the major classes of disease. Course fee: \$675-anatomy Pass/Fail Course fee: \$675

BSCI 1101 Doctoring 1: History and Physical Exam P/F

This course introduces the student to the basic clinical skills of interviewing a patient and conducting a comprehensive medical history. Students learn to perform a normal physical examination on a healthy adult and document patient encounters (comprehensive history and physical examination) in an organized, accurate manner. The student integrates their own experiences during the course with longitudinal theme content to illustrate ways in which a physician communicates respect, compassion, and empathy. The student applies knowledge obtained from the longitudinal themes including the treatment of special patient populations (geriatric, pediatric etc.) and they will have specific training in the interview of the psychiatric patient. Pass/Fail

BSCI 1200 Hematology and Introduction to Pathology

The Hematology and Introduction to Pathology (HIP) module begins with an introduction to basic principles underlying disease: cell injury, adaptation, cell death and the effects that these processes have on tissues and organs. This is followed by an introduction to neoplasia. The second portion of the HIP module focuses on hematologic disorders, including anemias, coagulation disorders, and thrombotic disorders and how these conditions are treated. Reactive white blood cell disorders and hematologic malignancies will also be presented. Fail Thru Honors(MED)

BSCI 1201 Cardiovascular System

The Cardiovascular Module focuses on expanding the concepts presented in Foundations and developing a knowledge base in pathology, pharmacology and clinical skills associated with the heart and vascular system. The emphasis is on management of cardiovascular disease including hypertension, myocardial infarction, congestive heart failure, arrhythmias, and both congenital and acquired cardiovascular defects. The concepts presented in this module are linked those presented during the subsequent pulmonary and renal modules to emphasize the tight integration of these organ systems. Fail Thru Honors(MED)

BSCI 1202 Pulmonary System

This course begins with a review of pulmonary physiology from Foundations, followed by lung development and introduces radiologic imaging of lung structure. Students will study more in-depth lung physiology, and infectious and obstructive diseases of the lung in both adults and children. Students will be introduced to pathology, physiology, radiology and management of various acute critical conditions such as sepsis, acute respiratory distress syndrome and pulmonary embolism. Fail Thru Honors(MED)

BSCI 1203 Renal System

The Renal System Module covers the physiology defining normal renal function, clinical characteristics and pathology / pathophysiology of diseases of the kidney, and clinical disorders that result from failure of the kidney to function correctly. Students will learn to evaluate changes in fluid and electrolyte balance, mineral metabolism and glomerular function and renal clearance. The clinical implications of renal dysregulation/ dysfunction will be explored. Fail Thru Honors(MED)

BSCI 1204 Doctoring 2: Longitudinal Clinical Experience

During Doctoring 2 students begin to use the skills acquired in Doctoring 1. Students will interview, perform comprehensive and focused histories, and perform comprehensive physical exams to evaluate patients with diseases and symptoms. Students will document patient encounters in an organized manner. Student will be able to integrate clinical and basic science knowledge in order to: analyze basic laboratory results; develop a differential diagnosis; determine a basic science pathology and pathophysiology. The student will be able to integrate their own experiences during the course with longitudinal theme content to describe in depth at least two key lessons learned by attending an interprofessional patient safety meeting. Fail Thru Honors(MED)

BSCI 2100 Gastrointestinal System

The Gastrointestinal Module builds on the concepts learned in Foundations and other systems modules further enhancing their knowledge base in anatomy, biochemistry, microbiology, pharmacology, pathology, and clinical expertise pertaining to the field of gastroenterology, hepatology, and nutrition. This module uses a variety of pedagogies, including didactic lectures, problem-based learning (PBL) cases and independent study. Fail Thru Honors(MED)

BSCI 2101 Nervous System & Behavior

The Nervous System and Behavior Module (NSB) is a team-taught course that provides an interdisciplinary approach to understanding the nervous system and behavior. The module consists of multi-modal learning approaches: lectures, clinical presentations with patients, laboratory sessions, clinical correlations, small group learning exercises, self-study exercises and problem based learning (PBL) cases. The ultimate objectives and goals of the NSB Module are to provide an understanding of the structure, function and dysfunction of the nervous system. Mental illness, behavioral dysfunction, and substance use issues are presented from a biopsychosocial perspective with both pharmacological and psychological interventions for treatment. Fail Thru Honors(MED)

BSCI 2102 Doctoring 3: Longitudinal Clinical Experience

Doctoring 3 builds on skills gained from Doctoring 1 & 2 (interview, comprehensive/focused history, comprehensive/focused physical exam) to evaluate patients with diseases and symptoms, and document patient encounters in an organized, accurate manner. The student will be able to integrate clinical and basic science knowledge in order to: analyze basic laboratory results; develop a differential diagnosis; determine a basic science pathology and pathophysiology. The student will be able to integrate their own experiences during the course with longitudinal theme content to describe in depth at least two key lessons learned by attending an interprofessional patient safety meeting. Students are required to complete Basic Life Skills during Doctoring 3. This course spans the fall and spring semesters. Fail Thru Honors(MED)

BSCI 2103 Endocrine System

This module focuses on hypothalamic-pituitary axis, and normal growth patterns and growth disorders. Students will learn about diagnostic strategies and therapeutic options for various diseases including pituitary, metabolic, adrenal and thyroid disorders. Students will also be introduced to the diagnosis and pharmacologic management of osteoporosis. Fail Thru Honors(MED)

BSCI 2201 Reproductive Systems

This module focuses on hormonal regulation of reproductive function, evaluation and management of infertility, and pregnancy, including preconception planning and the physiology of birth. Students will be introduced to the management of diabetes, hypertension, and infectious diseases during pregnancy. They will also learn about uterine, ovarian and breast pathology, as well as the genetics of breast and gynecologic malignancies. Students will also be introduced to breast imaging and the medical treatment of breast cancer, as well as management of sexually transmitted infections and male genitourinary pathology. Students will discuss sexual identity, sexual function, and the reproductive health of older adults. Fail Thru Honors(MED)

BSCI 2202 Musculoskeletal System & Derm

Students will learn about the morphology, pathophysiology, clinical presentations and management of common skin disorders. They will spend time in the dermatology clinic where they will have the opportunity to perform skin examinations, and learn about evaluating and diagnosing skin conditions. Students will also learn about various bone disorders and soft tissue malignancies, including pathophysiology, diagnosis, differential diagnosis, management and treatment. The approach to various forms of musculoskeletal pain, relevant physiology, and treatments will be explored. Fail Thru Honors(MED)

BSCI 2304 Transition to Clerkship (P/F)

This course prepares students for the clerkships. It is composed of required sessions including large group and skills sessions. Pass/Fail

Emergency (EMER)

EMER 4M01 Advanced ECG Interpretation and Clinical Application (P/F)

This elective covers basic ECG interpretation, advanced ECG interpretation, and case-based clinical ECG interpretation. Pass/Fail

EMER 4M02 Introduction to Point of Care Clinical Ultrasound (P/F)

This two-week elective will provide an introduction to the use of bedside ultrasonography in routine clinical care in an emergency department setting. Students will learn how to use the ultrasound machine and how to perform the emergency medicine ultrasounds that are commonly used to help diagnose and differentiate our urgent and emergent, undifferentiated patients. Students will assist in review of studies performed by residents and faculty in the emergency department during regularly scheduled QA sessions. Emergency Medicine Online Interactive Ultrasound Course, Core Ultrasound FOAMed videos, in person didactics. Pass/Fail

EMER 3030 Emergency Medicine (Pass/Fail)

This third-year elective will provide an introduction to emergency medicine. Students will learn how to generate differential diagnoses that include urgent and emergent conditions consistent with history and physical examination findings in the undifferentiated patient. Students will be introduced to basic patient care and monitoring of common acute problems in the undifferentiated patient. Pass/Fail

EMER 4004 Emergency Adult Medicine

For the student interested in pursuing a career in Emergency Medicine, this elective will serve as an introduction to a county hospital emergency department similar to that in which he/she will train. For the student interested in other fields, this elective will provide an opportunity to learn about the early presentation and initial management of a variety of problems commonly seen in an emergency department. Due to the wide variety of patients seen, managing these problems will be a useful experience regardless of the student's chosen specialty. Fail Thru Honors(MED)

EMER 4005 Emergency Medical Services/Disaster

This elective will provide medical students with an insight into the full spectrum of prehospital and disaster medicine, including EMS medical direction, prehospital systems of care, interfacility transfer of patients, operational prehospital medicine, and disaster mitigation, preparedness, response, and recovery. This course will lead to a future physician who is better able to engage with the prehospital providers and agencies that respond and transport patients to or from the hospitals of their future careers. Additionally the learners will recognize the importance of disaster management and be prepared to participate in disaster planning and response. The student will work to understand major concepts in prehospital and disaster medicine as it pertains to systems of care in the prehospital to hospital, transfer, or post discharge realms. Fail Thru Honors(MED)

EMER 4007 Pediatric Emergency Medicine

This elective will give students the unique opportunity to learn about and care for acutely ill children who present with a wide range of presentations. Additionally, this elective allows students to spend time dedicated to pediatric emergency medicine, including the process of diagnostics, management, and transition of care, as well as perform procedures under direct supervision. Fail Thru Honors(MED)

EMER 4008 Houston Emergency Opioid Engagement System - HEROES

UT Health Heroes is a comprehensive care coordination system helping navigate patients through the complex recovery journey based on an understanding of physical and psychological components of substance use, related mental health issues, treatment, and recovery. Heroes works closely with first responders and other local providers to connect systems of care and identify individuals who need access to care. Community providers share data and provide referrals when individuals meet specific substance use and related mental health criteria. The program provides assertive community outreach, educating on treatment options and helping individuals navigate recovery. The program is comprised of peer recovery specialists, chemical dependency counselors, licensed and clinical social workers, physicians, advanced practice providers, research scientists, research coordinators, statisticians, academic professors, and data analysts. The Heroes program is a part of UT Health's Center for Behavioral Emergency and Addiction Research (C-BEAR) which houses additional projects including the Heroes Helpline for first responders, a Young Heroes program for adolescents, Family Support services, an Educational Campaign, and the mobile unit Project Integra, a joint initiative with UT Health's Department of Internal Medicine. Fail Thru Honors(MED)

Family Medicine (FAMD)**FAMD 3001 Family Medicine**

The goal of this clerkship is to introduce the principles and practice of Family Medicine, and to provide the essential clinical skills and training, which students will find useful in whichever specialty they choose to pursue. This clerkship focuses on the approach to the ambulatory patient and learning activities are planned to introduce the skills, knowledge, and attitudes that all physicians need when faced with such a patient. The curriculum for this course focuses more on the process of evaluating and treating a new patient or problem, and is not limited by a specific content. A core content will be addressed that is central to the acute, chronic, and preventive care that family physicians deliver. Additional knowledge and skills are gained in the specific areas relevant to the patient encounters. Students develop a framework within which they can initiate evaluation and care for any patient, regardless of clinical setting or problem, and do so in a fashion that fosters an ongoing relationship with the patient. Fail Thru Honors(MED)

FAMD 4028 Preventive Medicine

This elective incorporates the principles of preventive medicine in a family practice setting. The student will be able to observe and participate in patient assessment and diagnosis, patient consultation, exercise prescription, and identifying risk factors for the various age groups. The student will also learn the value of health maintenance and the prevention of illness in terms of its importance to the individual physician and his/her family. Fail Thru Honors(MED)

FAMD 4048 Ambulatory Family Medicine

This elective is designed for students who have completed their required Family Medicine clerkship and Ambulatory selective and desire more exposure to ambulatory Family Medicine. Fail Thru Honors(MED)

FAMD 4057 Lifestyle Medicine

Lifestyle medicine is a medical specialty that uses therapeutic lifestyle interventions as a primary modality to treat chronic conditions including, but not limited to, cardiovascular diseases, type 2 diabetes, and obesity. Lifestyle medicine trained physicians apply evidence-based, whole-person, prescriptive lifestyle changes to prevent, treat and manage conditions. Lifestyle medicine rests on the foundations of six pillars: a whole-food, plant-predominant eating pattern, physical activity, restorative sleep, stress management, avoidance of risky substances and positive social connections. Fail Thru Honors(MED)

FAMD 4058 Urgent Care

The urgent care elective will provide medical students with hands-on experience managing a broad spectrum of acute conditions commonly encountered in an outpatient setting. Material covered includes the evaluation and treatment of respiratory infections, musculoskeletal injuries, dermatologic conditions, gastrointestinal complaints, and minor trauma. Students will develop skills in rapid triage, diagnostic reasoning, and procedural techniques such as wound care, splinting, and incision and drainage. Emphasis will be placed on efficient yet thorough patient assessment, appropriate use of imaging and laboratory tests, and patient education. Additionally, students will gain insight into healthcare access, continuity of care, and cost-conscious decision-making. Fail Thru Honors(MED)

Geriatrics (GERI)**GERI 3030 Geriatrics (Pass/Fail)**

The geriatric and palliative third year rotation is designed to enable medical students to practice effectively in a clinical setting. Students will actively participate in the ongoing, daily care of older and/or palliative patients. Students will be paired with a geriatric or palliative preceptor who will provide clinical teaching and feedback. Throughout the clerkship, students will work with a variety of geriatric and/or palliative focused health professionals as part of the interprofessional team approach. Pass/Fail

Internal Medicine (INTM)**INTM 3001 Medicine**

The Internal Medicine Clerkship is an eight week rotation split into two four week blocks with the primary goal of introducing students to the evaluation and treatment of adults hospitalized with acute medical illness. Emphasis is placed on developing the skills to diagnose common clinical conditions and to recognize the clinical presentations of common diseases. Students will take patient histories, perform comprehensive physical exams, formulate problem lists with appropriate differential diagnoses, and document their findings in the electronic health record. Students will participate in the evaluation of a variety of patients as part of a team of residents and students under the supervision of an internal medicine faculty member. Fail Thru Honors(MED)

INTM 3030 Internal Medicine (Pass/Fail)

This elective will introduce students to the sub-specialties of Internal Medicine. Students will have the opportunity to preference the following experiences: Allergy/Immunology, Ambulatory Medicine, Cardiology, Endocrinology, Pulmonary Medicine, Nephrology, Rheumatology, General Oncology-LBJ, Medical Oncology, and Introduction to Oncology. Pass/Fail

INTM 4002 Ambulatory Internal Medicine

To familiarize the student with initial evaluation, treatment, and follow-up of problems commonly seen in the ambulatory setting of practicing internists. A variety of patient care problems will be encountered from the acute to the chronic, not only in the area of Internal Medicine but also in orthopedics, gynecology, and other fields. The course will focus on rapidly determining the patient's chief complaint and developing an intervention plan consistent with the severity of the illness. Fail Thru Honors(MED)

INTM 4004 Cardiology - Memorial Hermann Hosp

Students on this elective will gain experience in managing patients seen in a typical cardiology consultative practice; and practice electrocardiographic interpretation. Fail Thru Honors(MED)

INTM 4005 Endocrinology Clinical Elective

This elective offers an intensive ambulatory care experience in varied settings. Frequent small didactic sessions with faculty. Comprehensive review of all endocrinology with a goal of preparing the student for residency including inpatient and outpatient diabetes management, thyroid disorders, calcium and other electrolyte disorders, metabolic bone disorders, and pituitary diseases. During the rotation there are several interdisciplinary conferences. Fail Thru Honors(MED)

INTM 4018 Cardiac Electrophysiology

The goal of the rotation is to provide a balanced, structured and scholarly experience in both inpatient and outpatient clinical electrophysiology. Diagnosis and management of clinical arrhythmias is emphasized using both invasive and noninvasive techniques. Fail Thru Honors(MED)

INTM 4019 Evidence Based Practice Clerkship

This elective will demonstrate the practice of evidence-based medicine within a clinical context. Faculty will model the practice of EBP in real-time and within the context of patient cases. The general goals of this elective are as follows: - To help students develop advanced skills in EBP that they will utilize during residency and life-long to inform their care of patients using best available evidence. - To model EBP in the clinical setting - To foster the computer and searching skills required to practice EBM successfully. Fail Thru Honors(MED)

INTM 4022 Geriatrics/Palliative Care

This elective provides exposure to a wide range of geriatric clinical experiences in the outpatient setting which include house calls, clinic, elder mistreatment evaluations. There is also the option for inpatient palliative and geriatrics consultations. This elective helps students better understand how the health care system affects their patients. This knowledge can improve patient care in the inpatient and outpatient setting. Fail Thru Honors(MED)

INTM 4023 Pulmonary Medicine Consult/Critical Care

On the pulmonary consultation service elective, the student will be exposed to a wide range of pulmonary diseases in the form of an interesting and frequently challenging problem. A pathophysiologic approach to the diagnosis and management of this problem will be emphasized. In-depth teaching in the care of the critically ill patient will be an important part of the elective. Fail Thru Honors(MED)

INTM 4024 Rheumatology Clinical Elective

Musculoskeletal conditions are becoming an increasingly prevalent and important problem in clinical practice as the population ages. Acquiring knowledge and training in this area is an essential part of the medical education curriculum. The objectives of this rotation are: 1) Obtain medical knowledge on rheumatic diseases and the assessment of the functional anatomy of the musculoskeletal system 2) Obtain knowledge and gain an understanding of the importance & subtleties of the medical history in the evaluation of rheumatic diseases 3) Gain knowledge in the interpretation of autoantibody, immunologic, radiologic and pathologic findings of rheumatic diseases 4) Provide training in the skills necessary to function as an effective medical subspecialty consultant to other services Fail Thru Honors(MED)

INTM 4025 Gastroenterology Clinical Elec - LBJ

The Elective at LBJ offers significant opportunities to learn about acid peptic, vascular, neoplastic, and inflammatory disorders of the luminal GI tract. The student is exposed to pancreatic-biliary diseases and sees a broad spectrum of liver disease. Fail Thru Honors(MED)

INTM 4026 Gastroenterology Clinical Elec - Hermann

As part of the GI consultation team, the student on this elective will evaluate and help formulate a diagnostic and therapeutic approach to hospitalized patients with a wide variety of luminal and solid organ digestive diseases. These important diagnostic skills are acquired through close interaction with the faculty and fellows of the Division. With capabilities of videoendoscopy and small bowel capsule endoscopy, the student will have the opportunity to correlate clinical information with specific pathology. Fail Thru Honors(MED)

INTM 4042 Cardiology-LBJ Hospital

This elective offers opportunities to evaluate the patient at the initial presentation in the emergency room or on the wards; manage the patient on the wards and in the intensive care unit and intermediate care unit; observe transthoracic and transesophageal echocardiography; observe stress testing such as exercise and pharmacological stress echocardiography and nuclear stress studies. Fail Thru Honors(MED)

INTM 4045 Sleep Medicine

Students on this elective will gain a basic understanding of normal sleep physiology and most important sleep disorders, including methods of diagnosis and means of treatment with patient contact and hands-on experience in the Sleep Laboratory and Sleep Clinic. Fail Thru Honors(MED)

INTM 4049 Senior Elective in Hematology

Students will participate in a consultative inpatient hematology service and in hematology clinics. A broad range of hematological problems are seen. In addition, there is a didactic component, with small group formal and informal lectures with the faculty. The topics covered include review of the pathophysiology and treatment of different cytopenias (anemia, leukopenia, thrombocytopenia), coagulopathies, thrombotic disorders, bone marrow disorders and hemoglobinopathies. Fail Thru Honors(MED)

INTM 4053 Cardiology-MD Anderson

This course will provide the medical students with an educational opportunity to learn about the common and uncommon conditions present in patients with cancer and complications from cancer treatment. They will learn specialized cardiovascular pathophysiology, diagnostic, and management of risk factors. √ As part of the cardiology team, the students will rotate through the inpatient service. Opportunity to attend the out patient clinic will also be provided. √ Take history and perform physical exam on a unique population of cardiac patients √ Direct exposure to and teaching of transthoracic and transesophageal echocardiography and electrocardiograms, emphasizing the anatomy and physiology of the heart √ Direct exposure to and teaching of stress testing such as exercise and pharmacological stress echocardiography and nuclear stress studies √ Participate in patient assessment, diagnosis, and management with faculty supervision √ Attend the daily morning reports, Cardiology Grand Rounds, and the weekly Clinical Practice Conference. Fail Thru Honors(MED)

INTM 4057 Hyperbaric and Aerospace Medicine

Pathophysiology and Hyperbaric Oxygen Treatment (HBOT) of decompression sickness, air embolism, carbon monoxide poisoning, late effects of radiation, necrotizing infections/osteomyelitis and Enhanced Wound Healing Pathophysiology and treatment of chronic wounds including those related to pressure, infection, ischemia, lymphedema & Venous stasis Fail Thru Honors(MED)

INTM 4058 Medical Oncology

The Oncology Service at Memorial Hermann Hospital TMC will expose medical students to the management of patients with neoplastic diseases. The rotation is designed to provide students with the education necessary to work effectively with cancer patients at both the level of an internist, and subspecialist oncologist. The student will interact with patients requiring chemotherapy administration, and interact with patient who are having complications from disease progression or side effects from therapy, through attending outpatient clinics. The student will be supervised while they learn to coordinate patient care across the health care continuum, and will be allowed to take the lead for history taking for new patient encounters if desired. Scholarship is important, and the student is expected to learn that an oncologist is a humanistic scientist who cares for patients. The student will have firsthand experience implementing previous practice-based learning modules performed in medical school core lectures to solidify key medical knowledge as it relates to oncologic patients. Addition benefits will include learning how to implement cancer screening for prevention, understanding cancer survivorship, recognizing oncologic emergencies, and understanding prognosis for corresponding treatments. The resident will interact with different medical teams in a collegial manner and show compassion, integrity, and respect for others. Fail Thru Honors(MED)

INTM 4059 Intensive Care Nephrology

The student will be exposed to the basic science (physiology/ pharmacology) of the specialty as well as to clinical practice. This elective is comprised of a month on the Intensive Care Nephrology service. Bedside rounds will be conducted on all new admissions, consultations, and hospital follow-ups daily. Fail Thru Honors(MED)

INTM 4061 General Oncology LBJ General Hospital

The student will be exposed to the basic science (physiology/ pharmacology) of the general oncology as well as to clinical practice. The elective aims to provide the student with instruction in the broad field of general oncology ranging from prevention to the management of patients with advanced cancer. The student will participate in conferences, inpatient consultations, and office follow-ups of patients with various kinds of malignancies. There is excellent opportunity for learning physical examination findings, as well as the basic management of a broad spectrum of medical problems. Fail Thru Honors(MED)

INTM 4063 Advanced Cardipulmonary Therapies and Transplantation

This elective will introduce students to the Advanced Heart Failure and Transplant specialty, diagnostic and interventional catheterization procedures, non-invasive studies (echocardiography, EKGs, and stress testing), rounding on inpatient services and consulting on outpatients (including pre- and post-operative cardiac surgery patients), and alternative therapies available to heart failure patients. This elective will also introduce the student to the type of multispecialty care that is provided to a large number of patients with advanced and complex cardiac conditions. Fail Thru Honors(MED)

INTM 4064 Nephrology Clinical Consultation Service

Understanding of normal and abnormal fluid and acid base electrolyte physiology; and Understanding of pathogenesis, clinical expression, diagnosis, and therapy of acute and chronic renal disease with emphasis on acute renal failure in the ICU patient. Fail Thru Honors(MED)

INTM 4065 Exploring the End of Life

This elective will provide an in-depth introduction to various aspects of end-of-life care. Participants will become familiar with the medical aspects of end-of-life care by directly participating in patient care in the inpatient, outpatient, and home hospice (if available) care environments. Participants will also gain a better understanding of how end of life care fits into the greater medical system by reviewing legal aspects of end-of-life care and medical decision making in Texas. Finally, students will participate in organized independent reading and reflection exercises to further understand what patients and families experience during and after a loved one dies. Flexibility to design a program tailored to the needs and goals of each participant are encouraged. Fail Thru Honors(MED)

INTM 4066 Allergy/Immunology

Students on this elective will review the key clinical features and presentations of patients with allergies, asthma, immune deficiency, and/or other atopic diseases. Students will see and discuss patients with the attending in clinic, review evidence-based management, and observe procedures including skin testing, patch testing, spirometry, and immunotherapy Fail Thru Honors(MED)

INTM 4067 Introduction to Oncology MD Anderson

This elective is designed to expose students to all aspects of clinical oncology by direct participation in the daily disease-specific outpatient oncology clinics at the University of Texas MD Anderson Cancer Center in the Texas Medical Center. Multidisciplinary oncology is aimed at introducing students to the full breadth of roles that physicians play in taking care of oncology patients. The elective will primarily consist of engaging in patient care experiences across multiple disciplines (medical oncology, surgery, radiation oncology, pathology, radiology.) The goal is for the students to develop an understanding of how each discipline contributes to patient care and how they work together in a team setting. Basic therapeutic principles will also be acquired which will allow for greater understanding during these clinical experiences. Cancer patients often have very serious illnesses, and physicians and patients form long-term relationships. Therefore, students will also gain experience in having difficult and end-of-life conversations. Students will have the opportunity to work-up patients with new cancer diagnoses and to participate in the on-going care of patients with diverse cancer diagnoses. Students will participate as active members of the oncology team, attending the regularly scheduled clinical conferences and disease site-specific multidisciplinary tumor boards. Although the emphasis of the elective is on outpatient oncology in disease-specific units, students may also have the opportunity to work with the in-patient oncology team. Fail Thru Honors(MED)

Neurology (NEUR)**NEUR 3000 Required Neurology**

The Neurology clerkship is a four week rotation designed to educate students to take a relevant neurologic history, perform a comprehensive neurologic exam and based on their findings, effectively localize the lesion or determine the relevant neuroanatomical correlation. Students will have an opportunity to perform a neurologic exam on a standardized patient, encounter common neurologic emergencies in the simulation lab and repeatedly apply their knowledge in both inpatient and outpatient settings where they will encounter a broad range of neurologic diagnoses. Fail Thru Honors(MED)

NEUR 4004 Ambulatory General Neurology

This elective involves direct patient care within an ambulatory neurology setting. The students will be invited to attend neurology conferences including the residents didactic lecture series, weekly adult grand rounds presentation as well as pediatric grand rounds. In addition, the students will receive informal didactics while working with the attendings in the clinic. A multitude of general neurology topics will be covered: headaches (migraines, tension, cluster, paroxysmal hemicrania), neuromuscular diseases (myasthenia gravis, myopathies, neuropathies, motor neuron disease, Guillan Bare syndrome, etc.), seizure disorders, movement disorders (Parkinson's disease, Huntington's disease, spasticity, dystonia, etc.), dementia (Alzheimer's disease, frontotemporal dementia, Lewy body dementia, multi-infarct dementia, etc.), syncope, and spinal stenosis. Fail Thru Honors(MED)

NEUR 4005 Epilepsy

This elective involves direct patient care within an ambulatory neurology setting. The students will be invited to attend neurology conferences including the residents didactic lecture series, weekly adult grand rounds presentation as well as pediatric grand rounds. In addition, the students will receive informal didactics while working with the attendings in the clinic. Topics covered include diagnosis of epilepsy, the role of imaging and EEG, basics of anticonvulsant medication, treatment of status, and workup of epilepsy surgery. Fail Thru Honors(MED)

NEUR 4006 Movement Disorder & Neurodegen Diseases

This elective involves direct patient care within a primarily ambulatory setting. The students will be invited to attend neurology conferences including the residents didactic lecture series, weekly adult grand rounds presentation as well as pediatric grand rounds. In addition, the students will receive informal didactics while working with the attending in the clinic. The students will accompany the movement disorder group to deep brain stimulation (DBS) implantations where microelectrode recording is performed. The students will be exposed to the detailed preoperative selection of DBS candidates and learn by exposure the indications for DBS and the criteria and work up used to identify a good candidate. Additionally, the student will be exposed to the literature and evidence that supports the time frame for intervention and the treatment options available to patients with movement disorders. In addition, the students will be involved with the preoperative selection of appropriate intrathecal baclofen pump patients and will accompany the movement disorders group to perform baclofen trials. Fail Thru Honors(MED)

NEUR 4009 Neuro-Oncology

This elective builds upon the students' exposure to neurology in the required third year neurology clerkship. Students will be given the opportunity to refine their neurological exam and techniques. The students will be exposed to the principles and practice involved in making the diagnosis and developing treatment plans of patients with cancer of the nervous system or neurologic complications of a non neurologic malignancy. Students will have the opportunity to evaluate patients in an inpatient setting in addition to an ambulatory setting. This elective allows the students to work closely with Neuro-Oncology faculty on a daily basis. The students will be exposed to neuroimaging and will receive detailed instruction regarding the appearance of CNS/PNS malignancies on routine magnetic resonance imaging. Fail Thru Honors(MED)

NEUR 4010 Neuropsychiatry & Dementia

This elective is based in a neuropsychiatry clinic that is a referral center which receives patients from neurologists, psychiatrists, internists, and geriatricians, across the Houston area. This center commonly evaluates and diagnoses patients with symptoms of dementia, but also sees patients across the whole spectrum of neuropsychiatric and behavioral symptoms. The students will be involved in direct patient care in an ambulatory setting. They are also invited to attend neurology conferences, including the residents didactic lecture series, weekly adult grand rounds presentation, as well as pediatric neurology grand rounds. The students will be exposed to the full range of dementias. Alzheimer disease is the most prevalent dementia in the general population, which is also true of our patients, though we more frequently evaluate young patients with atypical presentations. Lewy Body Disease, Frontotemporal Dementia, Vascular Dementia, Parkinson, and Normal Pressure Hydrocephalus are also common. Rarer degenerative diseases ζ PSP, CBD, MSA, CJD ζ are seen once or twice most months. Though most patients are referred for dementia, we also see patients with a variety of neuropsychiatric symptoms secondary to head trauma, encephalitis, stroke, toxic-metabolic syndromes, and primary psychiatric illness. Diagnostic studies vary across the broad differential, and include neuropsychological testing, imaging (MRI, FDG-PET, DAT, amyloid PET), and laboratory evaluations. Treatment is highly variable depending on the diagnosis. Fail Thru Honors(MED)

NEUR 4011 Telemedicine Multidisciplinary

Students on this elective will develop a working knowledge and basic competence in performing a clinical evaluation via telemedicine. The will practice establishing rapport through appropriate telepresence and communication via telemedicine, obtaining a thorough yet efficient history from the patient and family via telemedicine, utilizing the telemedicine equipment to perform a focused physical exam, formulating a diagnosis and plan using information remotely gathered from history and exam, and understanding the use of telemedicine in various medical specialties and settings. Fail Thru Honors(MED)

Obstetrics/Gynecology (OBYG)**OBYG 4M08 Ob-Gyn Ultrasound Mini Elective**

Basic principles of ultrasound technology; ultrasound evaluations of the fetus; prenatal diagnosis; and antepartum testing Fail Thru Honors(MED)

OBYG 3001 Obstetrics/Gynecology

The Obstetrics and Gynecology clerkship covers pathophysiology of the female reproductive system. The basis for the diagnosis, management, and treatment of diseases specific to women are also covered. Students participate in patient encounters in the operating room, labor and delivery, emergency room, ambulatory clinics and on the hospital wards. Fail Thru Honors(MED)

OBYG 4002 Gynecologic Oncology

This elective will provide a thorough introduction to the basic principles of gynecologic oncology. Participants will become familiar with the principles and techniques of chemotherapy, radiotherapy, and surgery. This will be accomplished by direct participation in each of these areas of patient treatment. Participants' level of responsibility will be commensurate with their desire and experience. Flexibility to design a program tailored to the needs and goals of each participant will be allowed. Fail Thru Honors(MED)

OBYG 4006 Externship in Obstetrics

Management of labor and supervision of patients. Antepartum, intrapartum and postpartum management of obstetrical patients. Fail Thru Honors(MED)

OBYG 4007 High Risk Obstetrics/Maternal Fetal Med

This elective is designed for the student who has decided on a career in obstetrics and gynecology. It affords the opportunity to follow high risk pregnancies from initial prenatal assessment and counseling throughout pregnancy and intrapartum course. The Maternal Fetal Special Care Unit is a unique intensive care unit designed to handle all medical, surgical, and obstetric complications of pregnant women and their fetuses. Fail Thru Honors(MED)

OBYG 4008 Obstetrics & Gynecological Ultrasound

This elective is designed for the student who has chosen a career in Obstetrics/Gynecology or Diagnostic Radiology and desires a concentrated experience in obstetric imaging and prenatal diagnosis. The student will spend time at the Center for Maternal and Fetal Treatment in UTPB, the antenatal testing unit at MHH, or the LBJ Hospital perinatal testing center. Students have the opportunity to augment their clinical experience with ultrasound simulator lessons and hand on practices. Fail Thru Honors(MED)

OBYG 4009 Clinical Reproductive Endo & Infertility

It is anticipated that the student will develop a working knowledge of normal and abnormal reproductive biology which can be applied to the evaluation and treatment of females in a variety of clinical settings and in particular females with infertility and gynecological endocrine problems. Fail Thru Honors(MED)

OBYG 4016 Gynecologic Oncology

This elective will provide a thorough introduction to the basic principles of gynecologic oncology. Participants will become familiar with the principles and techniques of chemotherapy, radiotherapy, and surgery. This will be accomplished by direct participation in each of these areas of patient treatment. Participants' level of responsibility will be commensurate with their desire and experience. Flexibility to design a program tailored to the needs and goals of each participant will be allowed. Fail Thru Honors(MED)

OBYG 4017 Clin Externship in Ob & Gynecology

This elective is designed for students who strongly desire a career in obstetrics and gynecology. It features a board experience in gynecology and obstetrics with the residents, faculty, and staff at St Joseph's and Methodist Hospitals. Fail Thru Honors(MED)

OBYG 4025 Obstetrics & Gynecology/LBJ Hosp-Gren Tm

This elective is geared toward students interested in careers in women's health. High volume of routine and complicated peripartum patients; high volume of ambulatory care patients. Introduction to obstetrical procedures including ultrasound and focus on labor management and postpartum care. Fail Thru Honors(MED)

OBYG 4029 Externship in Gynecology - Oncology

This elective will provide an in-depth introduction to the basic principles of complex benign gynecology and gynecologic oncology. Participants will become familiar with multiple treatment modalities of chemotherapy, radiotherapy, and surgery by direct participation in patient care. Participants' level of responsibility will be commensurate with their desire and experience. Flexibility to design a program tailored to the needs and goals of each participant is encouraged. Unique opportunities include working with a small patient centered team with few attendings and the possibility of participating in a research project. Fail Thru Honors(MED)

OBYG 4031 Urogynecology & Pelvic Reconstructive Surgery

This elective will provide an in-depth introduction to the basic principles of Urogynecology and pelvic reconstructive surgery. Students will become familiar with multiple treatment modalities of incontinence, prolapse, and pelvic floor disorders. They will participate in clinic and surgery. They will be involved directly in all levels of patient care. Participant's level of responsibility will parallel with their desire and experience. Flexibility to design a program tailored to the needs and goals of each participant will be encouraged. Unique opportunities at UT include working directly with attending one on one in clinic. Fail Thru Honors(MED)

Patient Care (APC)**APC 4000 APC/Inpatient Memorial Hermann Hospital**

Students will deepen their knowledge of inpatient Family Medicine by providing direct patient care to hospitalized patients on the family medicine teaching service. Working with residents and faculty, students will learn about the diagnosis and management of common problems such as chest pain; myocardial infarction; cardiac, hepatic and/or renal failure; diabetes; metastatic cancer; pneumonia, sepsis, and other infectious diseases; COPD; HIV; and GI bleeding. Students will have the unique opportunity to spend 1 of the 4 weeks working with the night residents. This will increase the student's exposure to and experience with new hospital admission and performing acute care. Fail Thru Honors(MED)

APC 4010 APC/Medicine Acting Internship

The Department of Internal Medicine offers senior students the opportunity to act as interns on the teaching services in Internal Medicine. The rotation provides an opportunity for the senior student to make the transition from student to intern in medicine. It is designed to give the student a high degree of responsibility for patient care. The acting intern will share equal status with the medical interns on the service in all respects. Fail Thru Honors(MED)

APC 4013 APC/Internal Medicine - Pediatrics

The Department of Internal Medicine offers senior students the opportunity to act as interns on the teaching service in Internal Medicine-Pediatrics. The rotation provides an opportunity for the senior student to make the transition from student to intern in medicine. It is designed to give the student a high degree of responsibility for patient care. The acting intern will share equal status with the medical interns on the service in all respects. Fail Thru Honors(MED)

APC 4014 APC/Internal Medicine - Geriatrics

The Department of Internal Medicine offers senior students the opportunity to act as interns on the teaching service in the Geriatrics and Palliative Medicine Division. The rotation provides an opportunity for the senior student to make the transition from student to intern in medicine. It is designed to give the student a high degree of responsibility for patient care. The acting intern will serve as a medical intern on the service. Fail Thru Honors(MED)

APC 4020 APC/Pediatric Neurology

Students will learn to practice elements of pediatric neurology, including history of illness, birth and developmental history, family/social history, neurological examination, and formulation of treatment/management plan. Students will attend on inpatient service with attending pediatric neurologist and pediatric neurology / pediatric residents and will follow patients into the outpatient clinic. Topics covered include common and unusual child neurology disorders (e.g., seizures, autism, migraine, cerebral palsy, neurometabolic/neurocutaneous disorders, interviewing skills, history taking, neurological examination, and formulation of management). Fail Thru Honors(MED)

APC 4021 APC/Neurology/Stroke

The Department of Neurology and Stroke Institute offer senior students the opportunity to act as interns on the inpatient Stroke Service. The rotation provides an opportunity for the senior student to make the transition from student to intern on the Stroke Service. It is designed to give the student a high degree of responsibility for patient care. The acting intern will share equal status with the Neurology interns on the service in all respects. Fail Thru Honors(MED)

APC 4030 APC/High Risk Obstetrics/Maternal Fetal

Pathophysiology of common obstetric disorders such as preterm labor, preeclampsia, diabetes mellitus, etc. Maternal and fetal pathophysiology will be covered. Fetal respiratory and cardiovascular physiology as it relates to interpretation of fetal heart rate monitoring and biophysical profile assessment skills. Fail Thru Honors(MED)

APC 4032 APC/Obstetrics Inpatient Precept

Basic diagnoses and management of routine and high-risk obstetrical problems. Evaluation of patients in the emergency room referred to our service for consultation. Ambulatory care will include seeing patients in the OB Emergency Department, and weekly clinic. The student will be assigned to work with a team of residents and faculty. Fail Thru Honors(MED)

APC 4033 APC Gynecology-Oncology Inpatient/Memorial Hermann Hospital

This elective will provide an in-depth introduction to the basic principles of complex benign gynecology and gynecologic oncology. Participants will become familiar with multiple treatment modalities of chemotherapy, radiotherapy, and surgery by direct participation in patient care.. Unique opportunities at UT include working with a small patient centered team with 5 attendings on an inpatient service, ambulatory clinic, and surgical team. Fail Thru Honors(MED)

APC 4040 APC/Inpatient Pediatrics

General pediatrics Inpatient pediatrics Specific focus on the disease processes of hospitalized patients Fail Thru Honors(MED)

APC 4042 APC/Neonatal Intensive Care III Nursery

The student will achieve improved understanding of the physiology of the perinatal period including the process of normal transition from intrauterine life and physiology of disorders inherent in disruption of this normal transition. Fail Thru Honors(MED)

APC 4052 APC/Adult Inpatient Psychiatry

Faculty and staff on this rotation consist of two full-time psychiatrist and two full-time master social workers. Patients served by these units are either voluntarily admitted or involuntarily committed to the UTHealth Houston Harris County Psychiatric Hospital (UT-HCPC). The ages of patients served are 18 through geriatric age, with broad diversity. The average length of stay is 7 days. Diagnoses seen include psychotic, mood, anxiety, substance abuse, personality and cognitive disorders. Many patients have been dually diagnosed with substance abuse disorders and other primary psychiatric disorders. Some patients have intellectual developmental disorders or autism spectrum disorders. Treatment provided by the team includes psychiatric assessment, psychopharmacologic interventions, and psychotherapeutic treatment. Students spend approximately 30-40 hours weekly on the service, including 6-8 hours daily for rounds, documentation and case supervision. Students spend their time in medical and psychiatric evaluation, attendance at multidisciplinary team treatment planning meetings and rounds, in observation of program/administrative activities on the unit. Students will carry 4-5 cases at a time. Students will see their own patients daily, but will round with the team to be aware of all the cases on the unit. Case assignments are monitored by the unit attending physician to achieve a balanced clinical learning experience with the patients in regard to the age, sex, and diagnostic categories of the patients. Ongoing supervision is provided on a daily basis by the attending physician during rounds and treatment planning meetings. In the final week of the rotation, the student will give a formal patient case presentation with literature review during the resident case conference at UT-HCPC. The presentation will be approximately 20 minutes in length and will be attended by approximately 30 medical students, residents and faculty. Supervising faculty will provide close support in the development and presentation of the case. Fail Thru Honors(MED)

APC 4060 Cardiothoracic & Vascular Surgery MHH

Conduct and management of a cardiothoracic and vascular surgical service to include ambulatory care, inpatient work, consultation, and operating room. Clinical problems pertinent to preparation for internship in surgery. Fail Thru Honors(MED)

APC 4061 APC/General Surgery MHH Moody Service

Conduct and management of an elective general surgical service to include ambulatory care, inpatient work, consultation, and operating room. Clinical problems pertinent to preparation for internship in surgery. Will also receive exposure to minimally invasive and bariatric surgery. Fail Thru Honors(MED)

APC 4062 APC/Inpatient General Surgery LBJ

Conduct and management of a general surgical service to include ambulatory care, inpatient work, consultation, and operating room. Clinical problems pertinent to preparation for internship in surgery. Fail Thru Honors(MED)

APC 4064 Oral & Maxillofacial Surgery

Basic skills in evaluating and resuscitating injured patients; pre-operative care; post-operative care in the SIMU and on the wards. Also included are basic skills in evaluating, treating, operating and post-op care of acute General Surgery patients. Fail Thru Honors(MED)

APC 4065 APC/General Surgery Dudrick Service

Conduct and management of a general surgical service to include ambulatory care, inpatient work, consultation, and operating room. Clinical problems pertinent to preparation for internship in surgery. Will also receive exposure to minimally invasive surgery. Fail Thru Honors(MED)

APC 4066 APC/Trauma Surgery

Conduct and management of a trauma surgical service to include ambulatory care, inpatient work, consultation, and operating room. Clinical problems pertinent to preparation for internship in surgery. Fail Thru Honors(MED)

APC 4070 APC/Neurosurgery

The Department of Neurosurgery offers senior students the opportunity to act as interns on the Neurosurgery teaching services. Students will work one-on-one with faculty and will be exposed to the continuity of care for neurosurgical patients including seeing patient's pre-op, in the operating room, post-op, and in the outpatient clinic for follow-up care. This selective provides an opportunity for students to transition from student to intern in neurosurgery and is designed to give the student a high degree of responsibility for patient care. Students will function as an intern and will be evaluated at the level of an intern. Students will rotate through the vascular, spine, and tumor services. Specific objectives are as follows: Develop a thorough assessment of a patient's problems including the development of an appropriate differential diagnosis Take and document appropriately focused histories on patients Perform relevant physical examinations Follow assigned patients daily including writing a daily progress note Coordinate patient care with physician consultant teams and hospital services Arrange discharge plans including providing appropriate patient education and follow-up Assist with the creation of discharge summaries Students will function at the level of an acting intern on the service. Students will be responsible as the primary caregiver for their patients, discussing each of their patients with the senior resident and the attending on a daily basis during rounds. Students are required to attend the following conferences: Neurosurgery M&M, Neurosurgery Grand Rounds, Neuro-Radiology Conference, and the Neurosurgery Curriculum Conference. Students will take call with the team. Students will demonstrate attainment of the above objectives through attendance and participation in didactic conferences and attendance at clinical assignments and participation in clinical activities. Fail Thru Honors(MED)

APC 4080 APC/Urology

Exposure to the entire spectrum Urology. This includes a wide variety of general urology problems, urologic oncology, stone disease, neurogenic bladder disease, voiding dysfunction, incontinence, genitourinary injury, reconstructive urology, gender affirmation surgery and transgender care, erectile dysfunction and pediatric urology. Students will be involved in the operative, inpatient, and ambulatory care of urology patients. By the end of this elective, the student should be able to: 1. Describe urologic anatomy and physiology 2. Complete work ups for common urologic issues such as microscopic hematuria, voiding dysfunction, and stone disease. 3. Discuss the basic principles of the evaluation and management of common urologic malignancies, such as prostate cancer, kidney cancer, and bladder cancer 4. Discuss the basic pre-and post-operative management of urologic cancers, voiding dysfunction, and stone disease 5. Identify risk factors associated with and screening recommendations for urologic malignancies 6. Learn the basics of reading and interpreting urologic publications 7. Basic Knowledge of Urologic Radiology Students may be involved with call and will schedule with the resident team. Fail Thru Honors(MED)

APC 4090 APC/Orthopaedic Surgery

This selective will allow students to function as an acting intern in orthopedic surgery. Students will take orthopaedic histories and conduct appropriate physical examinations of the extremities and spine. This APC should be considered by students applying to an Orthopaedic Surgery Residency Program. By the end of this selective, the student should be able to: Summarize and interpret results of the history, physical examination, lab and imaging tests to form a differential diagnosis Develop treatment plans that include common therapeutic options Write complete and accurate daily progress notes including interpretation of clinical, laboratory, and radiographic findings Manage common inpatient orthopaedic conditions Perform basic procedures including reduction of fractures, application of casting and splints, insertion of skeletal traction pins, joint arthrocentesis, and basic suturing of lacerations Assist with basic orthopedic surgeries including long bone intramedullary nailings, eg. Tibia and femur, open reduction internal fixation of periarticular fractures, open reduction internal fixation of pelvic and acetabular fractures, open reduction and internal fixation of long bone injuries, management of common pediatric fractures, incision and drainage of septic arthritis, irrigation and debridement/wound vac application of open fractures and soft tissue defects Students will attend clinical activities as determined by the resident team and will take call every fourth night. Students will attend didactic conferences with the resident team and the weekly fracture review (every Wednesday night from 5-7 pm). Students will meet with the APC director (Dr. Warner) every Monday night from 4-6 pm for case review. Students will demonstrate attainment of the above objectives through attendance and participation in didactic conferences and attendance at clinical assignments and participation in clinical activities. Fail Thru Honors(MED)

APC 4100 Plastic Surgery

This selective is intended to be chosen by those students who are truly interested in pursuing Plastic Surgery as a career goal. This selective will allow students to function as an acting intern in plastic surgery. Students should enter this rotation with a thorough knowledge of the pertinent anatomy, proficiency in the implementation of the reconstructive ladder and a working knowledge of the permutations of grafts and flap surgery. Students enrolling in this elective should have a functional knowledge of the basics in all areas of Plastic Surgery including, Cosmetic Surgery of the face and body, to include body contouring surgery, Oncologic Plastic Surgery and specifically breast reconstruction surgery, Hand and Microsurgery, Facial Trauma, Pediatric Plastic Surgery, Acute burn and burn reconstruction and the reconstruction of other traumatic injuries. During APC 4100, the student will be considered an active member of the surgical team and will work one-on-one with the Plastic Surgery Fellows and Staff. This will be a mentoring type relationship: The student will be expected to function independently with very close monitoring and appropriate guidance from the Fellows and Staff. As an active member of the team, the student will be counted on to participate in all aspects of patient care including; daily inpatient rounds, seeing patients in the outpatient clinics and daily participation in operative cases. By the end of this selective, the student should be able to: Summarize and interpret results of the history, physical examination, lab and imaging tests to form a differential diagnosis Develop treatment plans that include common therapeutic options Write complete and accurate daily progress notes including interpretation of clinical, laboratory, and radiographic findings Manage common plastic surgery conditions Assist with basic plastic surgeries including craniofacial surgery; including craniosynostosis, cleft lip and cleft palate; hand surgery: including nerve compression syndromes, Flexor tendon injuries, extensor tendon injuries and microsurgical replantation of digits; and facial trauma: including frontal sinus fractures, orbital fractures, mid-face fractures, and mandibular fractures. Students will attend all didactic conferences (Thursday mornings from 6 am-9 am). Call is required and the student will take call every third night with the fellow. Students will demonstrate attainment of the above objectives through attendance and participation in didactic conferences and attendance at clinical assignments and participation in clinical activities. Fail Thru Honors(MED)

APC 4110 Emergency Medicine

This is a complaint-based Emergency Medicine experience in which undifferentiated patients as well as critically ill patients are represented. Procedural skills are developed as well as providing the student a robust resuscitation experience. Fail Thru Honors(MED)

APC 4111 Hospital Medicine

This APC exposes fourth year medical students to the variety of patients that a hospitalist can render care to in a high acuity tertiary center. It will cover inpatient and outpatient preoperative risk assessment, hospitalist perioperative management of neuro and ortho trauma patients. Inpatient management of cirrhotic patients and medical co-management as a consultant on patients at our acute rehabilitation center who are post spinal cord injury, stroke and traumatic brain injury. Skills Acquired: At the end of the rotation the student should be able to: perform a preoperative risk assessment for a patient that will be having a non-cardiac surgery as well as learn how to medically optimize patient perioperatively (on ambulatory and inpatients) identify potential sequelae of spinal cord injury and recognize potential emergencies that can occur in spinal cord injury patients. recognize signs or symptoms of potential solid organ pathology in a trauma patient. be familiar with long term complications of cirrhosis and understand the management of several urgent medical conditions than occur in cirrhotic patients understand and manage sequelae of CNS trauma (TBI and SCI) With these experiences, the student will be well equipped to not only pursue a future career in hospital medicine should they choose to do so but they will also learn a great deal to enhance their medical knowledge in whatever other field of medicine they choose to pursue. Fail Thru Honors(MED)

APC 4120 Otolaryngology - Head & Neck Surgery

This selective will allow students to function as an acting intern in clinical otolaryngology. Students will take Otolaryngologic histories and conduct appropriate physical examinations of the head, neck and body. This APC should be considered by students who have an interest in clinical otolaryngology. By the end of this selective, the student should be able to: Summarize and interpret results of the history, physical examination, lab and imaging tests to form a differential diagnosis Develop treatment plans that include common therapeutic options Write complete and accurate daily progress notes including interpretation of clinical, laboratory, and radiographic findings Manage common inpatient conditions related to the head and neck Perform basic procedures including suturing of lacerations, flexible laryngoscopy, tracheostomy tube management, dressing changes, endotracheal tube management, and ear cleaning Students will be able to first-assist during otolaryngological surgeries including major head and neck cancer surgeries, airway surgeries (including endoscopy), ear surgeries, sinus surgeries and microvascular reconstructive surgeries. Effectively and professionally present an Otolaryngology case at departmental grand rounds Students will attend clinical activities as determined by the resident team and will take call every fourth night. Students will attend all educational conferences including trauma conference. Students will meet with the APC director (Dr. Roy) each week for a review of the case log. Students will demonstrate attainment of the above objectives through attendance and participation in didactic conferences and completion of clinical assignments and participation in clinical activities. Fail Thru Honors(MED)

APC 4130 General Neurology Inpatient Services

The Department of Neurology offers fourth year medical students the opportunity to act as interns on the inpatient General Neurology service at Memorial Hermann Hospital. This rotation provides an opportunity for the fourth year medical student to make the transition from student to intern on the General Neurology inpatient service. It is designed to give the student a high degree of responsibility for patient care. The acting intern will share equal status with the Neurology interns on the service in all respects. Fail Thru Honors(MED)

APC 4140 Pathology

This APC is intended to serve as a rigorous rotation in which students can get an in-depth look into pathology and develop skills that will allow them to excel in future pathology residency programs. The goals of the APC are: To provide a strong foundation in pathology training for students intending to apply for pathology residency. To assist students applying for pathology residency by allowing them more interaction with department faculty and signaling to residency programs that they are serious about their interest in pathology. Students will meet with the course director on the first day to review/develop their Individualized Learning Plan for the rotation. Students will take call as follows: Paired with an upper-level resident for 1 week of AP call and 1 week of CP call. At-home call: the student is expected to stay late or return to the hospital for patient care needs (frozen sections, exchange/apheresis procedures, peripheral smear review). Fail Thru Honors(MED)

Pediatrics (PEDI)**PED 3001 Pediatrics**

Pediatrics is an eight week rotation, with four weeks spent in the inpatient setting and four weeks spent at one of several outpatient pediatric clinics scattered around Houston. Students will be exposed to the care of newborn infants, children with acute and chronic medical conditions, and well children coming in for their regular checkups. A major focus of the clerkship is injury and illness prevention. Students will become familiar with congenital and acquired conditions, as well as normal and abnormal patterns of development. Fail Thru Honors(MED)

PED 3030 Pediatrics (Pass/Fail)

This elective will introduce students to the sub-specialties of Pediatrics including pediatric cardiology and pediatric infectious disease for the physician-scientist. Pass/Fail

PED 4002 Pediatric Cardiology

This elective not only provides conventional exposures to pediatric cardiology, but also provides opportunity to observe a variety of transcatheter interventional procedures in children. Fail Thru Honors(MED)

PED 4003 Pediatric Endocrinology

This elective combines directed literature review with patient appointments to provide systematic study of pediatric patients with 1) growth disorders, hypopituitarism and sexual precocity, 2) insulin-dependent diabetes mellitus, 3) adrenal and gonadal disorders, and 4) thyroid disorders and rickets in the respective weeks of the elective. Fail Thru Honors(MED)

PED 4006 Pediatric Nephrology

The student on this elective will be exposed to a broad range of problems in pediatric nephrology-congenital diseases, acquired diseases, acute and chronic renal failure, dialysis and transplantation, fluid and electrolyte disorders, and hypertension. Fail Thru Honors(MED)

PED 4013 Pediatric Hematology

Evaluation of common hematologic disorders (i.e. anemia, thrombocytopenia); basic review of treatment of above entities; consultation on diagnostic difficulties of both hematology and oncology; participation in the Gulf States Hemophilia Center treatment team; management of patients with Sickle Cell Anemia and thalassemia; and opportunities for clinical research. Fail Thru Honors(MED)

PED 4014 Pediatric Oncology

Introduction to pediatric Oncology with emphasis in the care of children and young adults using multiple discipline approach for acute and chronic problems. Fail Thru Honors(MED)

PED 4016 Harris County CPS Medical Clinic

This elective provides a general pediatrics outpatient experience in a high-risk population of children and adolescents with CPS involvement. Fail Thru Honors(MED)

PED 4017 Child Safety and Integrated Care

This elective provides both inpatient and outpatient clinical experiences on a busy child maltreatment team, as well as opportunities to learn from trauma-informed mental health professionals and behavioral health specialists. Students will learn about various types of child injuries that represent abuse, as well as accidental injuries and non-traumatic conditions that may be confused for abuse. They will also participate in evaluations of sexually abused and neglected children. Students will learn about child maltreatment via hospital and clinic cases, as well as via directed reading. They will attend multidisciplinary team meetings (MDT) and journal club, and they will be invited to witness courtroom proceedings when these occur. Students will have the opportunity to observe trauma-focused mental health treatment provided to children and families in our outpatient clinic. Targeted behavioral health treatment occurs with our inpatient pediatric psychology team. Students will receive didactic instruction in behavioral health best practices. Students will also have opportunities to learn about provision and coordination of evidence-based assessment and wraparound care for patients and families with complex medical and psychosocial needs. Fail Thru Honors(MED)

PED 4018 Genetics

Diagnosis and management of genetic diseases, malformation syndromes, and metabolic diseases; genetic counseling; and application of molecular genetics to clinical medicine. Fail Thru Honors(MED)

PED 4019 Pediatric Gastroenterology & Nutrition

Common gastrointestinal disorders in infants and children as well as their nutritional repercussions; nutrient requirements in infancy and their relationship to functional maturation of the gastrointestinal system; and diagnostic and therapeutic measures available to children with digestive disease. Exposure to a variety of diseases of the pediatric GI tract, including: recurrent abdominal pain, constipation, esophageal reflux, inflammatory bowel disease, allergic and eosinophilic disease, celiac disease, cyclic vomiting syndrome, short bowel syndrome, and liver transplantation. Fail Thru Honors(MED)

PED 4034 Pediatric Allergy/Immunology and Rheumatology

This elective will expose students to a variety of congenital and acquired immunodeficiencies, common pediatric rheumatic and musculoskeletal conditions, such as juvenile arthritis, pediatric SLE, multiple autoimmune disease. Students will have the opportunity to work one-on-one with pediatric allergy/immunology and rheumatology attendings and will be able to customize clinical experiences to their specific interests. Fail Thru Honors(MED)

PED 4035 Pediatric Pulmonology

This elective will expose students to a variety of pediatric respiratory diseases. Students will evaluate and manage a broad range of pediatric respiratory diseases, including but not limited to asthma, bronchopulmonary dysplasia, chronic respiratory failure and ventilator dependence, sleep apnea, and respiratory consequences of neuromuscular disease. Fail Thru Honors(MED)

PED 4038 Pediatric Neurology

Common and uncommon neurological conditions in pediatric patients (ex. Epilepsy, headaches, autism, developmental delay, neuromuscular disorders, metabolic/mitochondrial disorders, genetic conditions, and other neurological symptoms). The students will spend 2 weeks in the outpatient clinics and 2 weeks on the inpatient consult service. There will be a weekly grand rounds to attend and the students will have to present at one of these grand rounds. Fail Thru Honors(MED)

Required Critical Care (RCC)**RCC 4000 Required Critical Care**

The required critical care rotation places fourth year students in an ICU setting, caring for the sickest patients in the hospital under the supervision of critical care fellows and faculty. Students are able to request from a list of ICUs, tailoring the experience to their intended career. There is a focus on procedures and ventilator management. Fail Thru Honors(MED)

Surgery (SURG)**SURG 3001 Surgery**

The Surgery clerkship curriculum emphasizes the basic clinical skills required to solve common surgical problems. Students will be introduced to preoperative, postoperative, emergency, and ambulatory care of patients. By the completion of this clerkship, students will be expected to demonstrate an understanding of the pathophysiology of surgically treatable diseases and to have acquired sufficient knowledge and diagnostic skills to be able to recognize when a patient's condition might best be served by a surgical consultation. Students will also develop skills for the safe, effective, and efficient management of patients in the hospital and ambulatory setting. Fail Thru Honors(MED)

SURG 3030 Plastic Surgery (Pass/Fail)

This third year elective has been designed to introduce the third year medical student to the field of Plastic Surgery. Students will be exposed to all areas of Plastic Surgery during this elective including; cosmetic surgery of the face and body, body contouring surgery, oncologic plastic surgery, breast reconstruction, hand and microsurgery, facial trauma, pediatric plastic surgery, acute burn and burn reconstruction surgery as well as reconstruction of other traumatic injuries. During the rotation students will be considered an active member of the Plastic Surgery Team and will work one-on-one with the Plastic Surgery fellows and staff. As active members of the team, students will be expected to participate in all clinical aspects of patient care including, daily inpatient rounds, seeing patients in outpatient clinics and daily participation in operative cases. Pass/Fail

SURG 4004 Sub Internship At LBJ

Conduct and management of a general surgical service to include ambulatory care, inpatient work, consultation, and operating room. Clinical problems pertinent to preparation for internship in surgery. Fail Thru Honors(MED)

SURG 4011 Pediatric Surgery

This is an acting surgical internship, and 4th year students are expected to fully participate in all aspects of pediatric surgical patient care (newborn/congenital, trauma, and cancer) from the time of hospital admission to discharge. Activities include but are not limited to performing H&Ps and minor procedures and participating in surgeries. Fail Thru Honors(MED)

SURG 4013 Plastic Surgery

This elective provides an overview of plastic surgery and students will experience the different facets of plastic surgery including cosmetic surgery of the face and body, to include body contouring surgery, oncologic plastic surgery and specifically breast reconstruction surgery, hand and microsurgery, facial trauma, pediatric plastic surgery, acute burn and burn reconstruction and the reconstruction of other traumatic injuries. Fail Thru Honors(MED)

SURG 4016 Reconstructive Microsurgery of Cancer Pt

The student will observe and participate in the care of patients undergoing a wide variety of state-of-the-art reconstructive plastic surgery for cancer patients, with particular emphasis on reconstruction of the head and neck, breasts, skin, torso, pelvis, and extremities. The student will be exposed to a broad range of plastic surgery techniques including microvascular surgery, which involves the transfer of tissue flaps from distant parts of the body. He or she will gain an appreciation for the interdisciplinary nature of care for the cancer patient and how this care focuses on the quality of life, not just the quantity of life. Students will spend time both in the operating room and in the clinic (seeing patients pre- and postoperatively), providing the student with the opportunity to follow patients through their complete surgical course. This rotation may be of particular interest to students who wish to learn about plastic surgery, surgical oncology, medical oncology, head and neck surgery, orthopedic surgery, urology, gynecologic surgery, breast cancer, and skin cancer. Fail Thru Honors(MED)

SURG 4019 Gen/Trauma Surgery HH Duke Service

This rotation offers the student the opportunity to work as a sub-intern on the trauma surgery service at the Texas Trauma Institute at Memorial Hermann Hospital, the busiest level one trauma center in the United States. Students will encounter critically ill and injured trauma patients and will participate in their care from ER admission through discharge. Fail Thru Honors(MED)

SURG 4034 Outpatient Surgery/Ambulatory Care

This elective will be based mainly in the Surgery Outpatient Clinic at LBJ Hospital. Regular clinics include: general surgery/vascular - 12 hours/week; breast care clinic - 8 hours/week; pediatric surgery clinic - 2 hours every other week; and minor procedure clinic - 2 hours/week. Fail Thru Honors(MED)

SURG 4038 Abdominal Transplant Surgery

This elective will expose students to the management and care of abdominal transplant patients. Students will be involved in the operative, inpatient, and ambulatory care of the pre- and post-liver, kidney, and pancreas transplant patient. Students will also have the opportunity to learn about immunosuppression therapy. Fail Thru Honors(MED)

SURG 4039 Vascular Surgery Sub-Internship

The curriculum for senior medical students on the vascular surgery service provides broad exposure to the specialty. Students follow patients through the initial consultation from the office, emergency ward, and hospital transfer through treatment and recovery. Students learn the differential diagnoses, physical exam, and initial evaluation of patients with vascular disease. UT vascular surgeons run the outpatient and inpatient vascular ultrasound laboratory and students will learn about the indications for ordering different vascular studies and how they are interpreted. Once the student arrives at the correct diagnosis, they will learn about the different treatment options, including medical therapy, open surgical and endovascular treatments. Fail Thru Honors(MED)

SURG 4040 General Surgery - Moody-West

This elective will expose students to the management of patients in a busy general surgical service with a focus on advanced gastrointestinal surgery, robotic and advanced laparoscopic surgery, and surgical endoscopy. Students will work closely with 6 faculty surgeons and a fourth year UT general surgery resident. During certain times of the year, students will also work with a minimally invasive surgery fellow. There is a large amount of direct interaction with attending surgeons. The focus of this rotation is developing skills of diagnosis, evaluation, as well as treatment planning for surgical diseases and continue further development of operating room technical skills for those interested in a residency in general surgery or a surgical subspecialty. Fail Thru Honors(MED)

SURG 4041 Surgical Oncology MDACC

This is 4-week advanced rotation in Surgical Oncology at the University of Texas MD Anderson Cancer Center that is designed for medical students who have a strong interest in entering a surgical or oncologic specialty. During this rotation, the student will have an opportunity to observe the multidisciplinary care of patients with cancer and major cancer operations, participate in perioperative management, and evaluate patients in clinic. The student may also see inpatient Surgical Oncology consults with the on-call fellow. This is a hands-on rotation, and students are expected to actively participate in patient care, oral presentations, rounds, and surgery, and will be given the responsibilities appropriate for a sub-intern. Approximately one month prior to the rotation, students may request areas of interest (please provide a ranking of the top 3 choices): Breast Surgical Oncology, Colon and Rectal Surgery, Endocrine Surgery, Hepatobiliary, Melanoma, Peritoneal Surface Malignancies, and Sarcoma. Fail Thru Honors(MED)

Transition to Residency (RTR)

RTR 4000 Required Transition to Residency (P/F)

This course includes specialty-based workshops, panel discussions, plenary speakers, and clinical skills practice sessions designed to prepare students for residency. Pass/Fail

United States Medical Licensing Examination - USMLE (USML)

USML 3001 USMLE Prep

USMLE Prep Credit/No Credit