

# Pre-Clerkship Course Descriptions

Course credits pertain to 2015-2016 matriculants. For prior matriculants, please [view information](#).

## **Age-Related Topics (ARTS): MBART-MAIN**

The goals of this course are to provide an introduction to both pediatric and geriatric clinical medicine by highlighting the similarities and differences in basic principles of pathophysiology as they pertain to patients at either end of the age spectrum.

Credits: 1.25

Course Directors: [Melissa Carbajal](#) and [George Taffet](#)

## **APEX: MCAFX-MAIN**

The goal of this course is to effect the transition of a knowledgeable fourth-year graduating student to a professional physician in training. The course allows for students to personalize the educational experience to meet their personal interests and needs. It offers a unique, practical and interactive focus on solidifying students' medical school experiences while developing and fine-tuning skills that will help them enter their internship and residency with confidence.

Credits: 2

Course Director: [Joslyn Fisher](#)

## **Behavioral Science: MBBES-MAIN**

The goals of this course are to increase the learner's understanding of the biological, psychological, social and cultural processes that influence normative development across the lifespan; and to increase the learner's understanding of mental illnesses including diagnosis, psychopharmacology and psychotherapy. Along with the increased knowledge in course content, secondary goals are to provide avenues for enhanced awareness about the implications of personal bias and application of these principles in clinical encounters. This course is designed to create a foundation of knowledge that will be used in the Psychiatry clerkship.

Credits: 3.5

Course Directors: [Sindhu Idicula](#) and [Kristin Kassaw](#)

## **CABS-Business and Leadership in Medicine: MCBLM-MAIN**

The goals for the course are for the learner to understand the rationale for teaching business and leadership in medical school; be able to explain the ethical implications of attention to business issues in patient care; develop and demonstrate competence in analyzing the impact of a patient's insurance on their care; be able to describe the key elements of successful practice management; be able to discuss the legal and regulatory environment of office and hospital practice; and be able to explain how governmental policies concerning health and healthcare delivery are developed and implemented.

Credits: 0.75

Course Director: [Stephen Whitney](#)

### **CABS-Dermatology: MCDRM-MAIN**

The goals of this course are to provide the fundamentals for understanding the pathophysiology of common dermatologic diseases; provide an understanding and knowledge of the pertinent history, clinical exam findings, and diagnostic clinical testing/strategies utilized for dermatologic diseases; and to reinforce the application of and integration of clinical findings to diagnostic differentials and treatment for dermatologic diseases to prepare the learner to transition from the classroom to the clinical setting.

Credits: 0.75

Course Director: [Harry Dao Jr.](#)

### **CABS-Evidence-Based Medicine (EBM): MCEBM-MAIN**

The goals of this course are to develop skills in applying the medical literature to patient care; set a pattern for life-long learning; promote evidence-based decision-making on rotations and in clinical practice; and to practice team problem-solving in a 'safe' environment.

Credits: 1

Course Director: [Cara Foldes](#)

### **CABS-Nutrition: MCNUT-MAIN**

The goals of this course are to integrate basic concepts of nutrition relevant to pathophysiology encountered in common clinical settings in which nutrition plays an especially important role, including that encountered in patients with gastrointestinal, hepatic, endocrine, renal and cardiac disease; and to understand the potential role of nutritional guidance or intervention in reducing the incidence or severity of common medical disorders.

Credits: 0.75

Course Director: [Craig Jensen](#)

**Cardiology: MBCAR-MAIN**

The goals of this course are to provide introduction to clinical cardiology including the heart as a pump, electrocardiography and treatment of cardiac rhythm disorders, heart sounds, heart failure, acute coronary syndromes, sudden cardiac death, cardiomyopathies, pericarditis, valvular heart disease and congenital heart disease. The pathophysiology, prevention and management of atherosclerosis, ischemic heart disease, valvular disease, cardiac arrhythmias as well as prevention and treatment of hypertension and other cardiovascular risk factors as well as treatment of various prevalent heart diseases such as heart failure and coronary artery disease will be considered.

Credits: 2.25

Course Director: [Gabriel Habib](#)

**Endocrinology: MBEND-MAIN**

The goals of this course are to provide the fundamentals for understanding the pathophysiology of common endocrine disorders; provide an understanding and knowledge of the pertinent history, clinical exam findings, and diagnostic clinical testing/strategies utilized for common endocrine disorders; provide an understanding and knowledge of the principles of endocrinology and treatment strategies; and to reinforce the application of and integration of clinical findings to diagnostic differentials and treatment for endocrine disorders to prepare the learner to transition from the classroom to the clinical setting.

Credits: 1.75

Course Director: [Nalini Ram](#)

**Ethics: MCETH-MAIN**

The goals of this course are to provide opportunities for students to master core knowledge of ethics in clinical practice and to master reasoning skills of ethics in clinical practice

Credits: 1.25

Course Director: [Jennifer Blumenthal-Barby](#)

**Foundations Basic to the Science of Medicine (FBSM): MBFBS-MAIN**

The goals of this course are to increase students' knowledge of basic biomedical sciences and ability to integrate and apply these foundational sciences to the practice of medicine. Students will become literate in the major basic science disciplines important to their future practice as a physician. By the end of the course, students will be sufficiently literate in biomedical sciences to be able to read and understand an article in the *New England Journal of Medicine*; learn to integrate basic science concepts across traditional scientific

disciplines (biochemistry, cell biology, histology, gross anatomy, biostatistics, pharmacology, physiology, genetics); apply basic science into organ based systems as an initial step in understanding clinical pathophysiology, diagnostics and therapeutics; begin to develop attitudes and behaviors appropriate to the medical profession; and foster the lifelong learning required to maintain scientific and clinical competence throughout their careers.

Credits: 21.25

Course Directors: [J. Clay Goodman](#) and [R. Ramachandr Reddy](#)

### **Gastroenterology (GI): MBGST-MAIN**

The goal of this course is to increase knowledge of the gastrointestinal system and common disease processes that can affect its function. These include disorders of the luminal gastrointestinal tract – esophagus, stomach, small intestine and colon – as well as the liver, pancreas and gall bladder.

Credits: 2

Course Director: [Milena Gould](#)

### **General Pharmacology: MBPHR-MAIN**

The goal of this course is to increase students' general knowledge of pharmacology and particularly pharmacodynamics, pharmacokinetics, adrenergic drugs, and cholinergic drugs. Antimicrobial drugs are introduced as a prelude to the Infectious Disease course. Students will be able to describe drug uptake, distribution, action and elimination; have integrated their knowledge of the autonomic nervous system with the drugs and receptors that function in the adrenergic and cholinergic components of the autonomic nervous system; list the stages of the drug discovery and approval process; and properly write a drug prescription, taking into account knowledge of young, adult and senior patient populations.

Credit: 1.5

Course Directors: [R. Ramachandr Reddy](#) and [Lynn Yeoman](#)

### **Genetics: MBGNT-MAIN**

The goal of this course is to introduce the students to the discipline and practice of medical genetics for the prenatal, pediatric and adult patient.

Credits: 1.25

Course Director: [Shweta Dhar](#)

### **Genitourinary/Gynecology (GU/GYN): MBGUG-MAIN**

The goal of this course is to introduce the student to the discipline and practice of Obstetrics/Gynecology and Urology. Normal and complicated pregnancy, infertility and birth control will be considered. Tumors of the male and female reproductive systems and urinary system are discussed. Women's health issues including breast cancer are discussed.

Credits: 1.25

Course Directors: [Jennifer Bercaw-Pratt](#) and [Jennifer Taylor](#)

### **Head and Neck Anatomy: MBHNA-MAIN**

The goals of this course are careful dissection and understanding of the head and neck with emphasis on the skull and cranial cavity, orbit, ear, facial nerve and parotid gland, muscles of the face and scalp, function of the suprahyoid and infratemporal regions, pharynx, nasal cavity and sinuses, and larynx. Furthermore, there is an introduction to radiology and embryology of the face and neck. The cranial nerves are carefully defined in terms of innervations, motor and sensory functions, and autonomic pathways. Microanatomy of the eye and ear are presented in terms of basic ophthalmologic and ENT surgical procedures of interest to the general future physician. The retina and organ of Corti are compared with respect to elementary sensory processing as a prerequisite to the subsequent Neurology course.

Credits: 2.5

Course Director: TBD

### **Hematology/Oncology: MBHMO-MAIN**

The goals of this course are to provide an understanding of the pathophysiology of the regulation and function of blood cells and hemostasis; provide an understanding and knowledge of the principles of transfusion medicine; provide an understanding and knowledge of the principles of cancer medicine and treatment strategies; and to understand the actions and complications of the major categories of cancer therapeutic agents. As many specific cancers are taught in their appropriate systems courses, this course can be summarized as the details of hematology and the principles of oncology.

Credits: 2.5

Course Directors: [Andrea Marcogliese](#) and [Mark Udden](#)

### **Immunologic/Pathologic Basis of Disease: MBIPD-MAIN**

The goals of this course are to prepare the students to approach the study of diseases and apply those principles to clinical diagnosis. This approach will be through both Immunology and the principles of General (systemic) Pathology. The normal and deranged immune system will be covered in relationship to the

pathology of inflammation, autoimmunity, infections, tumors and autoimmune disorders. The fundamental cellular and tissue responses to injury, hemodynamic disorders, neoplasia and infection are covered.

Credits: 4.75

Course Director: [Francis Gannon](#)

### **Infectious Disease: MBIND-MAIN**

The goals of this course are to provide introduction to the basic principles and clinical aspects of infectious diseases including bacteria, viruses, fungi and parasites; introduce pathophysiology, diagnosis and management of different infectious diseases as well as aspects of prevention; and to further expand the concepts of differential diagnosis in infectious disease.

Credits: 7

Course Director: [Shital Patel](#)

### **Integrated Problem Solving (IPS) 1-2: MBPS1-MAIN, MBPS2-MAIN**

The goals of this course are for students to participate in the building of a functional group, show respect for faculty and peers, and adjust his/her level of participation in a manner that both supports and encourages group function; take responsibility and develop a plan of ongoing self-appraisal and self-directed learning to assure he continues to refine his/her behavior, knowledge, skills and attitudes to serve patients, the profession and society; participate in problem-based learning and use Internet search tools for the basics of decision analysis and evidence-based medicine; apply basic science knowledge to the pathophysiology of clinical symptoms and diagnoses being explored in the problem-based learning cases as well as identify epidemiology and biopsychosocial determinants of health that relate to the problem-based learning cases; communicate with colleagues and promote the learning of peers through development of learning issues, using technology to access medical information resources; and to identify the need for and provide specific examples of community health resources that meet the medical, psychological and social needs of a patient and their family.

Credits: MBPS1 (2 credits) MBPS2 (2.5 credits)

Course Director: [Lynn Yeoman](#)

### **Introduction to Radiology/Laboratory Medicine: MBRLM-MAIN**

The goals of this course are to understand the role of Laboratory Medicine in the practice of medicine; understand there is always utility as well as limitations in laboratory tests; and to understand the different imaging modalities, appearance of abnormalities on imaging studies, and indications for ordering different radiology studies.

Credits: 1.75

Course Directors: [Karla Sepulveda](#) and [Jun Teruya](#)

### **Nervous System: MBNRS-MAIN**

The goal of this course is to provoke an intense (and enjoyable) encounter with the nervous system so that students are prepared for their clinical clerkships, and for further scientific and clinical mastery of this discipline. Clinically relevant neuroanatomy and neurophysiology are covered in such a way that students will master clinical localization and pathophysiology. Specific disease states are introduced to foster better understanding of clinical neuroscience and to prepare students for the Neurology clerkship.

Credits: 7

Course Director: [Paul Pfaffinger](#)

### **Patient Safety: MBPSA-MAIN**

The goal of this course is to prepare learners with the foundational knowledge necessary to understand the context, key principles and competencies associated with the discipline of patient safety in the delivery of healthcare services.

Credits: 0.75

Course Director: [Anne Gill](#)

### **Patient, Physician and Society (PPS) 1-2: MBPP1-MAIN, MBPP2-MAIN**

The goals of this course are to provide students with basic interviewing, physical examination and medical communication skills; allow students to correlate anatomy and physiology with normal physical exam findings in ambulatory patients; reinforce the fundamental values of medical professionalism; and to help students view the broader context of health care using the relationship-centered care and integrated interviewing models.

Credits: MBPP1 (2.25 credits) MBPP2 (3 credits)

Course Director: [Alicia Kowalchuk](#)

### **Patient, Physician and Society (PPS) 3: MBPP3-MAIN**

The goals of this course are to continue to develop patient-centered interviewing skills to obtain a complete history; correlate pathophysiology learned in the morning classes with abnormal physical findings on hospitalized patients; and to inculcate altruistic and compassionate patient care.

Credits: 3.75

Course Director: [Anita Kusnoor](#)

### **Renal: MBRNL-MAIN**

The goals of this course are to provide introduction to clinical nephrology: specifically, abnormalities in electrolytes and acid base, glomerulonephritis, acute kidney injury and chronic kidney disease, in adults and children.

Credits: 1.75

Course Director: [Rajeev Raghavan](#)

### **Respiratory: MBRSP-MAIN**

The goals of this course are to provide the fundamentals for understanding the pathophysiology of common respiratory diseases; provide an understanding and knowledge of the pertinent history, clinical exam findings, and diagnostic clinical testing/strategies utilized for common respiratory diseases; provide an understanding and knowledge of the principles of pulmonary medicine and treatment strategies; and to reinforce the application of and integration of clinical findings to diagnostic differentials and treatment for pulmonary diseases to prepare the learner to transition from the classroom to the clinical setting.

Credits: 1.75

Course Director: [Suryakanta Velamuri](#)

### **Transition to Clinical Rotations: MBITC-MAIN**

The goal of this course is to facilitate the transition of second-year Baylor medical students from the basic sciences to the clinical years. The goal is to provide basic skills and information to allow students to readily participate in patient care. At the end of the course, second-year students will be able to describe effective studying strategies for clinical rotations; demonstrate how to glove and gown using sterile technique; maintain sterile environment in the OR; navigate the EMR to find pertinent information; manage commonly described interpersonal and intrateam stressors on the wards; understand what is expected on a typical day on the wards for a given clerkship and how to succeed as a ward clerk; compose a SOAP note; and to discriminate between appropriate and inappropriate types of public disclosure concerning clinical experiences.

Credit: 1

Course Director: [Erica Hubenthal](#)

# Core Clerkships

\* Course credits pertain to 2015-2016 matriculants. For prior matriculants, [view information](#).

## **Family and Community Medicine Clerkship: MCFAM-MAIN**

The Family and Community Medicine Clerkship introduces students to the role and identity of the family physician in today's healthcare system and demonstrates the family medicine approach to the comprehensive care of common health problems.

Credits: 4

Clerkship Director: [William Huang](#)

## **Longitudinal Ambulatory Clinical Experience (LACE): MCLCC-MAIN AND MCLPCP-MAIN**

The Longitudinal Ambulatory Clinical Experience (LACE) is a required course for all third-year medical students on Thursday afternoons from July to June. Students gain knowledge about common, chronic medical disorders treated in an ambulatory setting and an increased understanding about the roles of non-physician healthcare providers delivering services in the community. Students practice professional behaviors and communicate with team members while learning more about the social, financial and compassionate challenges of healthcare. Students are assigned to a clinical preceptor for a six-month semester. An additional six months will be devoted to work in a wide range of community health clinics; hospices; shelters for women, adolescents, or the homeless; adult and child health protective services; and chaplaincy. The curriculum focuses on prevention and health maintenance, ambulatory medicine, palliative care, systems-based practice and an introduction to essential services for the social and health needs of patients outside of the traditional hospital environment.

Credits: 3.0 (MCLCC) 2.25 (MCLPCP)

Course Director: [Sanghamitra Misra](#)

## **Medicine Clerkship: MCMED-MAIN**

Core Medicine is a clinical rotation designed to develop students' skills in diagnosis and management of illness in adults. Each student will have a unique experience in medicine. Learning will be self-directed and based on the patients seen. Students will learn a great deal about physical diagnosis, laboratory evaluation and differential diagnosis of important disorders. Students will also be expected to learn fundamental aspects of therapy that can be use on other rotations.

Credits: 12

Clerkship Director: [Andrew Caruso](#)

### **Neurology Clerkship: MCNEU-MAIN**

The required Clerkship in Neurology is a four-week rotation designed to begin to teach the skill of localizing pathology within the neuroaxis. The emphasis is, therefore, on thinking in terms of neuroanatomy rather than on disease entities and management issues. Students will learn through didactic lectures, syllabus materials, supervised direct patient interaction, and clinical instruction.

Credits: 4

Clerkship Director: [Doris Kung](#)

### **Obstetrics/Gynecology (OB/GYN) Clerkship: MCOBG-MAIN**

The mission of the OB/GYN Clerkship is to provide the medical student with the basic information concerning women's health issues needed by any practicing physician and expose the student to the breadth of obstetrics and gynecology. The discipline focus of the clerkship is to develop the medical student's technical skills, especially those unique to the field, such as pelvic exams and delivery techniques; and to develop core clinical knowledge base essential for delivering primary healthcare for women of all ages.

Credits: 8

Clerkship Director: [Jennifer Bercaw-Pratt](#)

### **Pediatrics Clerkship: MCPED-MAIN**

The goals of the Pediatric Clerkship are for students to access and discuss preventive healthcare and anticipatory guidance for families, children and adolescents; to learn the presenting symptoms, diagnosis and management of common childhood physical and mental illnesses; identify social and financial barriers to medical care for children and adolescents; and to know the recommendations for routine screening for the following: development, nutrition, mental health, anemia, lead, tuberculosis, sexually transmitted diseases, oral health, hearing and visual acuity.

Credits: 8

Clerkship Director: [Elaine Fielder](#)

### **Psychiatry Clerkship: MCPSY-MAIN**

The Medical Student Clerkship in Psychiatry is an eight-week rotation required of all medical students for graduation. The Psychiatry Clerkship strives to educate students in the diagnosis and treatment of mental

illness as well as the spectrum of normal and abnormal behavior through the lifespan. Students will be given an appreciation of mental health and mental illness in all areas of healthcare, and we hope that students will strive to be a psychologically informed physician. Students will learn in various settings on the rotation including didactic lectures, syllabus material, patient interaction, clinical teaching on rounds, observation of patient interviews by other clinicians, videotapes and required text readings.

Credits: 8

Clerkship Director: [Kristin Kassaw](#)

### **Surgery Clerkship: MCSUR-MAIN**

The Michael E. DeBakey Department of Surgery welcomes students to their core clerkship. The mission of the Michael E. DeBakey Department of Surgery is to inspire the next generation of surgeons by providing medical students with a balanced surgical experience that will meet core surgical competencies in both knowledge and skills. During this clerkship, students will spend four weeks on a general surgery service, two weeks on a surgery subspecialty service, and two weeks in the emergency room. The activities in each hospital vary somewhat; therefore, students receive specific orientation at the hospital to which they are assigned.

Credits: 8

Clerkship Director: [Juliet Holder-Haynes](#)

## Sub-Internships

**Course credits pertain to 2015-2016 matriculants. For prior matriculants, please [view information](#).**

### **Family Medicine: MEFAM 515**

*Satisfies requirement for 3rd/4th-year sub-internship.*

Students are encouraged to take the course between January of the third year and December of the fourth year. The goal of the Family Medicine sub-internship is to expose students to the underserved patients on the Family Medicine Service at Ben Taub Hospital. Students will assume the role of an intern and will learn the family medicine approach to the care of adult hospitalized patients with emphasis on caring for patients in the context of their family environment, addressing psychosocial, cultural and financial issues and providing longitudinal care for patients with chronic issues. **Night float is required.**

Credits: 4

Course Director: [Fareed Khan](#)

**General Medicine: MEMED 502 or MEMED 503**

*Satisfies requirement for 3rd/4th-year sub-internship.*

Students are encouraged to take the course between January of the third year and December of the fourth year. The student functions like an intern on the general medicine wards at Michael E. DeBakey Veterans Affairs Medical Center or Ben Taub Hospital. Under the supervision of the medicine resident and attending physician, the student has a primary patient care responsibility and participates in all of the clinical and educational activities of the medical service. Practical aspects of patient care are emphasized. The elective is a demanding one, but is conducted with strong support from the faculty and house staff and provides excellent transition to any residency training program. **Night call is required.**

Credits: 4

Course Director: [Andrew Caruso](#)

**Neonatal Intensive Care: MEPED 516B**

*This course is not offered the month of July and satisfies requirement for 3rd/4th-year sub-internship.*

Students are encouraged to take the course between January of the third year and December of the fourth year. The student functions as an acting intern and gains valuable clinical experience under supervision. The student will be assigned to a house staff team, working with the team as it rotates through the neonatal intensive care unit (NICU). \*\*The Visiting Student will be assigned to a house staff team, working with the team as it rotates through Level II for two weeks for orientation to Ben Taub and then the NICU for two weeks.

Credits: 4

Course Directors: [Jenelle Little](#)

**Pediatrics: MEPED 547**

Students are encouraged to take the course between January of the third year and December of the fourth year. The student will demonstrate pediatric intern level knowledge, attitudes and skills. The student is assigned to one of the Texas Children's Hospital's Pediatric Hospital Medicine (PHM) teams, consisting of an attending, one-to-two supervising residents, two-to-three interns, one-to-two clerkship students, and sometimes a PHM fellow. The sub-intern admits patients, evaluates all medical problems, and formulates a therapeutic plan under supervision. S/he is responsible for patient handoffs at the beginning and end of shifts. S/he writes and pends orders for co-signature prior to implementation. Admission orders stem from diagnosis specific EBM order sets. Sub-interns are on-call an average of every fourth night and are directly supervised by a resident. A faculty member is available at all times. During call, the sub-intern is responsible for cross-cover issues on all of his/her team's patients. Patient-family centered rounds (PFCR) are conducted

daily at the bedside with the medical team. Attendance at educational conferences is highly recommended. The resident lecture series is held at noon on weekdays. Morning report is held Monday through Wednesday and Grand Rounds are on Friday. The exact time and location for these conferences varies and may be confirmed with the house staff office.

Credits: 4

Course Directors: [Mary Rocha](#)

**Surgery: MESUR 501 or MESUR 541 or MESUR 546**

*Satisfies requirement for 3rd/4th-year sub-internship.*

Students are encouraged to take the elective between January of the third year and December of the fourth year. The student should increase his/her knowledge of the fundamentals of general surgical practice and acquire skills used in the evaluation and treatment of general surgical conditions. Hospital assignment is made by the department.

Credits: 4

Course Director: [Bindi Naik-Mathuria](#)

## Selectives

**Course credits pertain to 2015-2016 matriculants. For prior matriculants, please [view information](#).**

**Anesthesiology: MCANE-MAIN**

The two-week selective in Anesthesiology is designed as an introduction to the specialty of anesthesiology. The selective provides the medical student with an exposure to the clinical skills, didactic teaching and the perioperative care provided to patients. Medical students will also have an introduction into how the specialty of anesthesiology interacts with other medical specialties.

Credits: 2

Course Director: [Crystal Wright](#)

**Dermatology: MCDER-MAIN**

The purpose of the course is to give the student a working knowledge of common dermatological problems and to introduce him/her to the more unusual conditions as well. The student attends the regularly scheduled clinics at Harris Health Smith Clinic or MEDVAMC. Additionally, the student attends the teaching conferences conducted by the Department of Dermatology. The teaching conferences include the Dermatopathology

Conference, Textbook Conference, Journal Club, Chief Resident's Teaching Sessions, VA Grand Rounds, and the clinical Kodachrome Conference.

Credits: 2

Course Directors: [Sylvia Hsu](#) (Smith Clinic) and [Ramsey Markus](#) (MEDVAMC)

### **Genetics: MCGNT-MAIN**

The clinical selective in Medical Genetics involves evaluating patients on the inpatient consult service and in the outpatient clinics. Most of the patients are infants and children/teens.

Credits: 2

Course Director: TBD

### **Geriatrics: MCGER-MAIN**

The Geriatrics Group B selective is a two-week rotation experience, which allows students to interact directly with geriatric faculty in the care of the elderly patient. Exposure on this rotation may include any of the following: inpatient consult service at Ben Taub Hospital, inpatient SNF unit, outpatient clinic, and house calls at Quentin Mease Hospital, inpatient consult service at Houston Methodist Hospital and Baylor St. Luke's Medical Center, outpatient clinic at Park Plaza Hospital, and St. Luke's Center for Wound Care.

Credits: 2

Course Director: [George Taffet](#)

### **Neurosurgery: MCNSU-MAIN**

The student is assigned to one of the Baylor St. Luke's Medical Center Neurosurgery teams, consisting of six neurosurgery attendings, one chief resident, one senior resident, and one junior resident. The student will be responsible for seeing consults and admissions, as well as post-operative patients under the supervision of the team. The student will also cover surgical cases and will be given a level appropriate exposure to surgical procedures. The student will have the opportunity to function at the level of a Neurosurgical intern.

Credits: 2

Course Director: [Akash Patel](#)

### **Ophthalmology: MCOPH-MAIN**

This two-week course is designed to provide to students who will practice in the diverse areas of medicine, especially primary care, an expanded clinical experience and core of the clinical information, which will allow

them to diagnose and manage common ophthalmic problems, emphasizing appropriate referral and the avoidance of delays or omissions of proper eye care; to teach the essentials of the routine ophthalmic history and physical examination; to expose the student to the spectrum of systemic disease with ocular manifestations and to the scope and breadth of primary ocular disease; to teach to the student the recognition and initial management of ocular injuries and emergencies; to introduce the students to the profession of ophthalmology as a branch of the practice of medicine; and to instill in the student an understanding of the scope of the practice of ophthalmology, both medical and surgical, so that he may discriminate the purpose and skills of medical care from the art of refraction performed by non-professionals.

Credits: 2

Course Director: [M. Bowes Hamill](#)

### **Orthopedic Surgery: MCORS-MAIN**

This course is a two-week course rotating through the clinical aspect of Orthopedic Surgery. Students engage with faculty, residents, fellows, office staff and patients during this two-week rotation. Professional attire and behavior is expected of all participants. Students are expected to shadow assigned faculty during surgeries. Students are required a mandatory night of call at Ben Taub Hospital during the course. Students are required to submit a completed paperwork-signed memorandum at the end of their course for completion.

Credits: 2

Course Director: [Melvyn Harrington Jr.](#)

### **Otolaryngology: MCOTO-MAIN**

Students are integrated into the daily workflow of the Otolaryngology team – including outpatient clinics, inpatient and emergency room care, and the operating room experience. Formal lectures are provided in an online pre-recorded format, which supplements the daily didactic teaching by residents and faculty.

Credits: 2

Course Directors: [Deidre Larrier](#) (Texas Children's), [Nadia Mohyuddin](#) (Ben Taub) and [Robert Parke](#) (MEDVAMC)

### **Plastic Surgery: MCPLS-MAIN**

This course provides hands-on education for Plastic Surgery and Reconstructive procedures, including treatment of simple lacerations, trauma reconstruction and post oncology surgery reconstruction. Students will be expected to participate in daily rounds, operating room procedures, and floor/ER consults.

Credits: 2

Course Director: [Shayan Izaddoost](#)

### **Physical Medicine & Rehabilitation: MCPMR-MAIN**

This department offers selectives in the following areas:

**Pain Medicine.** This program provides the medical student a comprehensive introduction to the practice of pain management.

**Diagnosis and Treatment of Musculoskeletal Disorders.** This program was designed to enable the student to develop skills in the examination of the spine and extremities; develop knowledge of basic kinesiology and biomechanics; and begin to understand techniques of dynamic assessment.

**Spinal Cord Injury.** This clinical rotation is designed to provide an overview of the care of individuals with spinal cord injury/dysfunction (SCI/D), from initial rehabilitation through a lifelong continuum of care.

**Brain Injury.** Students will be given an opportunity to understand the dynamics of traumatic brain injury (TBI) and stroke rehabilitation. A familiarity with medical and functional complications after brain injuries such as spasticity, cognitive deficits and agitation, aphasia, dysphagia, neuropathic pain, and joint contractures will be gained.

**General Rehabilitation.** This clinical experience is designed to provide exposure to a wide variety of adult physical medicine and rehabilitation problems in both the inpatient and outpatient settings. The student should learn basic and clinical principles of neurological and musculoskeletal rehabilitation.

**Pediatric Rehabilitation.** Upon completion of this elective, the student should understand the principles of evaluation (including electrodiagnostics) and management (including medications, bracing, equipment and therapies) of children with acute and chronic motor disorders.

Credits: 2

Course Director: [Walter Wade](#)

### **Urology: MCURL-MAIN**

The Urology selective course provides medical students with a broad exposure to general urology, along with opportunities to experience the major urologic subspecialties, including cancer, urolithiasis, trauma and reconstruction, reproductive and sexual dysfunction, and pediatrics (subspecialty exposure varies depending on the clinical assignment site). The selective combines activities in the outpatient clinic setting, and in the inpatient and outpatient operating room settings. Students have an active, hands-on experience in examining

urologic patients under supervision, and scrubbing on a wide range of surgical procedures. Students participate in hospital rounds and consultations, and also pursue didactic activities which include a standard lecture series covering common urologic disorders relevant to the primary care physician.

Credits: 2

Course Director: [Michael Coburn](#)

## Electives

All elective course descriptions are available on the [School of Medicine website](#).

### **Anesthesiology**

**Coordinator: Dr. Crystal Wright**

- MEANE-401 Clinical Anesthesiology
- MEANE-425 Anesthesiology
- MEANE-502 Obstetric Anesthesiology
- MEANE-504 Pediatric Anesthesia
- MEANE-505A Cardiovascular Anesthesiology
- MEANE-506 Anesthesiology Research
- MEANE-507 Pain Medicine
- MEANE-508 Pediatric Cardiovascular Anesthesiology
- MEANE-SPEC Anesthesia Clinical Special
- MEANE-SPNC Anesthesia Non-Clinical Special

### **Biochemistry and Molecular Biology**

**Coordinator: Dr. John Wilson**

- MEBCH-423 Structural Basis of Human Diseases
- MEBCH-SPNC Special-Non Clinical

### **Department of Otolaryngology-Head and Neck Surgery**

**Coordinator: Dr. Julina Ongkasuwan**

- MEOTO-503 Clin. Otolaryngology - Head & Neck Surgery

- MEOTO-510 Otolaryngology Research
- MEOTO-SPEC Otorhinolaryngology Clinical Special
- MEOTO-SPNC Otorhinolaryngology Non-Clinical Special