Foundational Sciences Course Descriptions

* Course credits pertain to 2017-2018 academic year.

**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 Co-Directors: Melissa Carbajal, M.D. and Anita Major, M.D.

**APEX: MCAPX-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: Uma Ayyala, M.D.

**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 Co-Directors: Sindhu Idicula, M.D.
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, M.D., M.B.A.

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., M.D.

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. Students will be introduced to the basic biostatistics and epidemiology used in the medical literature and practice applying them to patient care.

Credits: 1
Course Co-Directors: Cara Foldes, M.D., John Coverdale, M.D., and Aanand Naik, M.D.

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 and 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, M.D.

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: 2.50
Course Director: Gabriel Habib, M.D.

Determinants, Disparities, and Social/Population Health (DDASH): MCDSH-MAIN

The over-arching goals of DDASH is to prepare learners to care for patients and specific populations by introducing students to major social determinants -- social class, race, gender, poverty, social networks/support, community cohesion, the occupational and neighborhood environments -- that affect population health and health inequities. This lens will be used to interrogate various population health issues that intersect with social determinants (e.g. chronic disease, homelessness, refugee populations, addiction, etc.) to prepare students for the challenge of combatting health inequity. Students will be exposed to foundational principles in providing culturally humble, psycho-socially engaged, structurally competent medical care. Finally, in examining these concepts, we develop core professional attributes (e.g. integrity, respect, compassion, justice, empathy) necessary to provide effective care in a complex social environment.

Credits: 2.25
Course Director: Malvika Juneja, M.D.
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, M.B.B.S.

Ethics: MBETH-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: TBD

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 a major medical journal; 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 Director: J. Clay Goodman, M.D.
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 Suarez, M.D.

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 Co-Directors: R. Ramachandr Reddy, Ph.D. and Lynn Yeoman, Ph.D.

Genetics: MBGNT-MAIN

The over-arching goal of this course is to introduce the students to the discipline and practice of medical genetics for the prenatal, pediatric, and adult patient by identifying genetic disorders related to connective tissue, dysmorphology, neurology, cardiovascular problems, skeletal dysplasias, hearing problems and cancer; by interpreting molecular and cytogenetic tests used to diagnose genetic conditions and by understanding the ethical implications of genetic disorders and their impact on patients and their families. This course is designed to create a foundation of knowledge for the genetic basis of diseases as it pertains to all specialties of medicine and to empower the student to be able to use genetic knowledge in the specialty of their choice.

Credits: 1.25
Course Director: Shweta Dhar, M.D.
Genitourinary/Gynecology (GU/GYN): MBGUG-MAIN

The goal of this course is to introduce the student to the discipline of Obstetrics/Gynecology and Urology. Topics covered include pregnancy, breast cancer, birth control, infertility in addition to the pathology of the male and female reproductive systems and urinary system.

Credits: 1.25
Course Co-Directors: Jennifer Bercaw-Pratt, M.D. and Jennifer Taylor, M.D., M.P.H.

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, including the retina and the organ of Corti, are presented to future physicians. General Sensory processing and basic ophthalmologic and ENT surgical procedures of interest are also included. This course functions as a prerequisite to the subsequent Nervous System course.

Credits: 2.5
Course Director: Ming Zhang, Ph.D.

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
Co-Directors: Mark Udden, M.D. and Andrea N. Marcogliese, M.D.

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, M.D.

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, M.D.

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/she 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, Ph.D.
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 Co-Directors: Karla Sepulveda, M.D. and Andrea Marcogliese, M.D.

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: J. Clay Goodman, M.D.

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. Additionally, students will learn to recognize weaknesses in our medical system that can lead to patient safety events and will be empowered to promote a culture of safety in the clinical environment.

Credits: 0.75
Course Co-Directors: Anne Gill, Dr. P.H., M.S., R.N., and Cara Lye, M.D.

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 (3.25) MBPP2 (4.0)
Course Director: Alicia Kowalchuk, D.O.

**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: 2.75
Course Director: Anita Kusnoor, M.D.

**Renal: MBRNL-MAIN**

The goals of this course are to provide an introduction to clinical nephrology: specifically the pathophysiology, diagnosis, treatment, and management of abnormalities in electrolytes and acid base, glomerulonephritis, kidney histology, acute kidney injury and chronic kidney disease, in adults and children. The learner will learn how dialysis and transplantation has shaped public policy. Utilizing common clinical scenarios and case-based group activity facilitate the transition from classroom to bedside.

Credits: 1.75
Course Director: Rajeev Raghavan, M.D.

**Respiratory: MBRSP-MAIN**

The goal of this course is to provide the fundamentals for understanding the pathophysiology of common respiratory diseases. By the end of the course, students will be able to: correlate history, clinical exam findings, and diagnostic clinical testing/strategies in order to form a differential diagnosis for common respiratory diseases; evaluate pathological images to diagnose respiratory disorders; and summarize pharmacological and non-pharmacological management options for common respiratory disorders.

Credits: 1.75
Course Director: Kanta Velamuri, M.B.B.S.
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 Co-Directors: Meghan McClure, M.D. and Teena Hadvani, M.D.
Clinical Course Descriptions

* Course credits pertain to 2017-2018 academic year.

Emergency Medicine: MCERM-MAIN

Please note, for the 2017-2018 academic year, this course is also considered a group B Selective. Please see class specific graduation requirements for more information.

The Emergency Medicine course is a two week rotation that is designed to give students exposure to the field of Emergency Medicine and the emergent approach and stabilization to the undifferentiated patient. This course will take place in the Ben Taub General Hospital Emergency Room, which sees approximately 100,000 patients a year and is also a Level 1 Trauma Center. As part of this rotation, students will learn the emergency medicine approach to common chief complaints. Commonly, the student will be the first provider to take a full history and physical from a patient and from this form a differential and a therapeutic plan to present to the senior resident and the attending. In addition, students will have the ability to perform common Emergency Medicine procedures: laceration repairs, incision and drainage, splinting and iv insertion.

Supplanting the clinical experience, the students will also have two hours of case based lectures a week, one hour of simulation sessions a week with an interdisciplinary team including PA students and pharmacy students. The students will also attend the Emergency Medicine grand rounds. Credits: 2

Course Director: Navdeep Sekhon, M.D.

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. Students will spend the majority of Clerkship time in the office of a family physician preceptor, where they will learn to conduct different types of ambulatory visits and to diagnose and manage common conditions seen by family physicians. Additional learning opportunities are provided through seminars and self-directed activities including videos, case studies, and recommended readings.

Credits: 4

Clerkship Director: William Huang, M.D.

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, M.D.

**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, D.O.

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

The OB/GYN Clerkship is designed to provide medical students with the knowledge and skills necessary to compassionately care for women of all ages. The student will be exposed to the breadth of obstetrics and gynecology, while focusing on skills unique to the field including pelvic examinations, vaginal delivery techniques, and exposure to the surgical environment. The clerkship goal is for the student to develop core clinical knowledge essential for providing comprehensive and advocacy for all aspects of women’s health.

Credits: 8
Clerkship Director: Jocelyn Greely, M.D.

**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, M.D.

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: Ye Beverly Du, M.D., M.P.H.

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 an ICU. The activities in each hospital vary somewhat; therefore, students receive specific orientation at the hospital to which they are assigned. The didactic schedule includes lectures from the Department of Surgery’s faculty leadership, online modules, small group teaching sessions, and a weekly skill lab.

Credits: 8
Clerkship Director: Juliet Holder-Haynes, M.D.
Sub-Internships

* Course credits pertain to 2017-2018 academic year.

Family Medicine: MEFAM515

*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, M.B.B.S.](mailto:fareed.khan@bcm.edu)

General Medicine: MEMED502 or MEMED503

*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 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. Students hone their history and physical skills, write orders, and develop diagnostic and therapeutic plans. They are also expected to learn how to manage transitions of care and to further develop their communication skills. The course is demanding, but it 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: [Anita Kusnoor, M.D.](mailto:ana.kusnoor@bcm.edu)

Neonatal Intensive Care: MEPED516B
Satisfies requirement for 3rd/4th-year sub-internship.

Please note, this Sub-Internship will no longer be offered after February 2018. 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 our neonatal intensive care unit (NICU) team, at Ben Taub Hospital, working with the team as it cares for newborns needing assistance in Labor and Delivery, in the NICU, and throughout the hospital. Three nights of night float are required. Credits: 4

Course Director: Catherine Gannon, M.D.

Neurology: MENEU503

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 neurology inpatient primary service at Ben Taub Hospital. Under the supervision of the chief neurology resident and attending physician, the student has a primary patient care responsibility. Emphasis is placed on understanding the role of a neurologist in patient care and preparing the student for residency. Night call is required.

Credits: 4

Course Directors: Doris Kung, D.O.

OB/GYN: MEOBG503

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 sub-internship experience occurs as part of the labor and delivery (L&D) teams at Texas Children’s Hospital Pavilion for Women (PFW) and Ben Taub Hospital (BTH), and is modeled after the role of the OB/GYN intern on L&D. The student is assigned to either the L&D team at BTH or at the PFW. The student is responsible for performing all intern level activities including, but not exclusive to: admit patients, evaluate all medical problems, manage labor, and formulate a therapeutic plan under supervision. The sub-intern will demonstrate the ability to counsel and obtain proper patient consent for vaginal deliveries, cesarean deliveries, and postpartum tubal ligations. She/he will be responsible for interpreting fetal heart rate tracings...
and formulating a plan of care for an abnormal tracing. She/he will be responsible for cross-coverage of postpartum patients during labor and delivery shifts. Night call will be taken on Friday evenings.

Credits: 4
Course Director: Helen Dunnington, M.D.

**Pediatrics: MEPED547**

*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 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 Director:

**Surgery: MESUR501 or MESUR541 or MESUR546**

*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. Sub-interns will, under supervision, admit patients, evaluate and formulate a plan, participate in operations and post-operative care, and write discharge summaries. Sub-interns are on call once a week during the 4-week rotation. The goal of
this rotation is to develop the student's ability to make and implement a plan of care in a surgical patient thereby improving the student's readiness for the transition into an internship.

Credits: 4
Course Director: Stephanie Gordy, M.D.
Selectives

* Course credits pertain to 2017-2018 academic year.

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: Laura Torres, M.D.

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 Director: John Wolf, M.D.

Genetics: MCGNT-MAIN

Three Clinical Selectives are offered in Medical Genetics, each providing a unique clinical experience for the medical students. Pediatric Genetics involves evaluating patients on the Texas Children's Hospital inpatient consult service and in the Metabolic Clinic. Adult patients with genetic disorders are the focus of the Adult Selective, where students evaluate patients in the outpatient clinics and on the inpatient service as well. The Prenatal Genetics Selective provides the student with the opportunity to evaluate and counsel patients in both ongoing pregnancies as well as in the preconception period.
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 Directors: Lori Potocki, M.D. (Pediatrics), Shweta Dhar, M.D., M.S. (Adult), and Karla Bermudez Wagner, M.D. (Prenatal)

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: Sanda Khin, M.B.B.S

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, M.D.

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: Lauren Blieden, M.D.

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: Christopher Perkins, M.D.

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: Kathleen Kelly Gallagher, M.D.

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, M.D., Ph.D.
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: Joslyn John, M.D.

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: Jennifer Taylor, M.D., M.P.H.
Electives

All elective course descriptions are available on the School of Medicine website.