Pre-Clerkship Course Descriptions

**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: 2.5
Course Directors: Melissa Carbajal (https://www.bcm.edu/people/view/b2191c52-ffed-11e2-be68-080027880ca6) and George Taffet (https://www.bcm.edu/people/view/b180da60-ffed-11e2-be68-080027880ca6)

**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: 4
Course Director: Joslyn Fisher (https://www.bcm.edu/people/view/b18eaaca-ffed-11e2-be68-080027880ca6)

**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: 7
Course Directors: Sindhu Idicula (https://www.bcm.edu/people/view/b1858c01-ffed-11e2-be68-080027880ca6) and Kristin Kassaw (https://www.bcm.edu/people/view/b1ee1e30-ffed-11e2-be68-080027880ca6)

**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: 1.5
Course Director: Stephen Whitney (https://www.bcm.edu/people/view/b27cc0c8-ffed-11e2-be68-080027880ca6)

**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: 1.5
Course Director: Harry Dao Jr. (https://www.bcm.edu/people/view/b1829c85-ffed-11e2-be68-080027880ca6)

**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: 2
Course Director: Cara Foldes (https://www.bcm.edu/people/view/b167ab88-ffed-11e2-be68-080027880ca6)

**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: 1.5
Course Director: Craig Jensen (https://www.bcm.edu/people/view/b1696ed3-ffed-11e2-be68-080027880ca6)

**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.
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.

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.

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.

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.

Course Director: Milena Gould (https://www.bcm.edu/people/view/b2139124-ffed-11e2-be68-080027880ca6)
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: 3
Course Directors: R. Ramachandr Reddy (https://www.bcm.edu/people/view/b2494bd5-ffed-11e2-be68-080027880ca6) and Lynn Yeoman (https://www.bcm.edu/people/view/b2034b65-ffed-11e2-be68-080027880ca6)

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: 2.5
Course Director: Lorraine Potocki (https://www.bcm.edu/people/view/b20065b0-ffed-11e2-be68-080027880ca6)

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: 2.5
Course Directors: Jennifer Bercaw-Pratt (https://www.bcm.edu/people/view/b1881860-ffed-11e2-be68-080027880ca6) and Jennifer Taylor (https://www.bcm.edu/people/view/c5e83428-27ce-11e4-a42d-005056b104be)

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 suprahoid 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: 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: 5  
Course Directors: Andrea Marcogliese (https://www.bcm.edu/people/view/b159e2b2-ffed-11e2-be68-080027880ca6) and Mark Udden (https://www.bcm.edu/people/view/b272d22f-ffed-11e2-be68-080027880ca6)

**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: 9.5  
Course Director: Francis Gannon (https://www.bcm.edu/people/view/b17ad063-ffed-11e2-be68-080027880ca6)

**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: 14  
Course Director: Shital Patel (https://www.bcm.edu/people/view/b2588a81-ffed-11e2-be68-080027880ca6)

**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.
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: 3.5
Course Directors: Arun Nachiappan (https://www.bcm.edu/people/view/b2234e21-ffed-11e2-be68-080027880ca6) and Jun Teruya (https://www.bcm.edu/people/view/b190093b-ffed-11e2-be68-080027880ca6)

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: 14
Course Director: Paul Pfaffinger (https://www.bcm.edu/people/view/b230e7e8-ffed-11e2-be68-080027880ca6)

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: 1.5
Course Director: Anne Gill (https://www.bcm.edu/people/view/b17ed345-ffed-11e2-be68-080027880ca6)

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 (4.5 credits) MBPP2 (6 credits)
Course Director: Alicia Kowalchuk (https://www.bcm.edu/people/view/b157c8a7-ffed-11e2-be68-080027880ca6)

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: 7.5  
Course Director: Anita Kusnoor (https://www.bcm.edu/people/view/b15da0c8-ffed-11e2-be68-080027880ca6)

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: 3.5  
Course Director: Rajeev Raghavan (https://www.bcm.edu/people/view/b23c759f-ffed-11e2-be68-080027880ca6)

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: 3.5  
Course Director: Suryakanta Velamuri (https://www.bcm.edu/people/view/b275700f-ffed-11e2-be68-080027880ca6)

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: 2  
Course Director: Erica Hubenthal (https://www.bcm.edu/people/view/b17725a8-ffed-11e2-be68-080027880ca6)

Related Sites

Academic and Faculty Affairs (/education/academic-faculty-affairs)

Elective Program (/education/schools/medical-school/current-students/course-descriptions/elective-programs/baylor-medical-student)

Registrar (/education/registrar)

Student Affairs (/education/schools/medical-school/student-affairs)
Compact Between Teachers, Learners, Educational Staff

This compact serves both as a pledge and a reminder to teachers, learners and educational staff that moral, ethical and professional behavior by all Baylor personnel is essential to the basic principles of Baylor College of Medicine. Read the compact. (Baylor login required.)

(https://intranet.bcm.edu/?tmp=education/docs/6-14-05_bcm_compact.pdf)