

Academic Bulletin Academic Year 2024-25

# **School of Medicine Mission**

Our Mission is to transform health care by inspiring Empathetic Scholars®.

# Vision

To be a leader in medical education, delivery of care and scholarship. We do this by focusing intentionally on the constellation of: Character – integrity, empathy, humanism, professionalism Content – medical knowledge, technology, innovation, integration Context – patient-centered models, cultural sensitivity, health care systems, finance, ambulatory settings, patient safety, chronic disease prevention and management Creativity – innovation, inquisitive scholars Collaboration – team-based care, patient and family partnerships, shared decision-making Community – servant leadership, public education, partnership, leadership Communication – exceptional communicators, active listeners

# **Diversity, Equity, and Inclusion**

We are committed to promoting and supporting diversity, equity and inclusion. It is a shared vision and responsibility of the faculty, students and staff within the School of Medicine to create a culture of respect, trust and empathy. We believe our capacity to care for our community and patients from diverse backgrounds, beliefs and identities is limitless.

# **Educational Program Objectives**

## Patient-Centered Care (PCC)

- 1. Conduct a comprehensive and problem-focused history and physical exam.
- 2. Elicit and synthesize diagnostic data and contextual factors to develop an accurate differential diagnosis.
- 3. Develop evidence-based and patient-centered care plans to prevent, treat, and manage acute and chronic diseases.
- 4. Perform basic procedural skills with gathering of consent, use of universal precautions and attention to patient comfort.

## Medical Knowledge (MK)

- 1. Apply established and emerging principles of biomedical and clinical science to diagnostic and therapeutic decision making, clinical problem solving, and other aspects of evidence-based health care.
- 2. Apply established and emerging principles of social and behavioral science to health maintenance, including the impact of psychosocial-cultural influences on health and disease.
- 3. Apply established and emerging principles of epidemiological science to the identification of health problems, risk factors, and disease prevention/health promotion efforts for patients and populations.

## **Communication and Collaboration (CC)**

- 1. Demonstrate compassion and clarity to develop a therapeutic relationship with patients and their families
- 2. Collaborate as a member of a health care team in shared decision-making.
- 3. Provide accurate and relevant written documentation and oral presentation and confirm understanding.
- 4. Consider others' perspectives in the context of role, experience, and circumstance.

### **Professionalism (P)**

- 1. Demonstrate empathy, compassion, respect, altruism, and integrity in all interactions
- 2. Demonstrate ethical judgment and support policies, protocols, and procedures (e.g. privacy and confidentiality) in the care and protection of patients and/or research participants
- 3. Demonstrate respect for the diversity and uniqueness of others and promote support of a culture of inclusive excellence

### Critical Appraisal and Life-long Learning (CALL)

- 1. Critically appraise and evaluate literature to discover and implement new knowledge and skills.
- 2. Demonstrate skills associated with lifelong learning to improve the delivery of patient-centered and evidence-based care.
- 3. Utilize technology to advance one's own learning or that of others.

#### Systems and Service (SS)

- 1. Apply principles of patient safety, quality improvement, and cost-effective care to prevent adverse events and improve health care outcomes using an integrated approach.
- 2. Describe and assess systems in communities and health care settings to identify gaps and support continuous quality improvement.
- 3. Describe strategies for advocating and engaging with communities in a leadership role to address factors in population health.

#### **Personal and Professional Formation (PPF)**

- 1. Accept responsibility, follow through on tasks, and utilize resources to seek help.
- 2. Evaluate one's own progress and wellness through reflection and goal setting.
- 3. Provide and respond to constructive feedback in a receptive manner.
- 4. Demonstrate self-preservation techniques and altruism in routine and stressful encounters.

# **Graduation Requirements**

To graduate, all students must:

- 1. Pass all required courses, clerkships, and selectives.
- 2. Pass all required elective credit hours.
- 3. Pass the graduation School of Medicine Observed Structured Clinical Examination (OSCE).
- 4. Pass the United States Medical Licensing Examination (USMLE) Step 1 and Step 2 CK as outlined in the USMLE Policy and must do so at least 14 calendar days prior to graduation.
- 5. Meet expectations in all seven competency domains: Patient-Centered Care, Medical Knowledge, Communication and Collaboration, Professionalism, Critical Appraisal and Life-long Learning, Systems and Service, and Personal and Professional Formation.
- 6. Complete all educational requirements within six years from matriculation date, excluding leaves of absence.

# **Required Course and Clerkship Descriptions**

## PHASE 1

#### Introduction to Medicine

Launches the incoming medical student on the successful professional journey from student to physician. The course introduces the student to the curriculum and learning environment, emphasizing the mindset and tools to encourage lifelong learning and professional development. **Course Weeks**: 2

Course Directors: Jo Anna Leuck and Erin Nelson

### Mechanisms of Health and Disease 1

The first course of the MHD sequence establishes a foundational understanding, integration, and application of the core basic medical sciences that underlie medicine, which is key to understanding how the body's organ systems work in both their healthy and diseased states in subsequent courses. This 9-week course addresses normal and abnormal structure and function of the human body and rationale for investigation, treatment, and other key clinical decisions. Course content is encompassed in three sections: "Introduction to Anatomical Sciences," "Health and Wellness," and "When Things Go Wrong." **Course Weeks**: 9

Course Directors: Imran Siddiqui and David Goff

#### Mechanisms of Health and Disease 2

This ten-week course deals with the human hematologic, musculoskeletal, integumentary, and endocrine systems in clinical care using an integrated and multidisciplinary approach. The course is designed to address normal and abnormal structure and function, and rationale for investigations, treatment, and other key clinical decisions pertaining to the disorders of the listed organ systems. The first four weeks are focused on the hematologic system (Section 1), followed by four weeks focused on the musculoskeletal and integumentary systems (Section 2). The last two weeks are focused on endocrine system (Section 3). **Course Weeks**: 10

Course Directors: Mitzi Glover and Veronica Tatum

#### Mechanisms of Health and Disease 3

This ten-week course takes the learner through the continuum of learning experience of integration of complex biological, more specially, physiological communication and feedback, mediated via structural, functional, cellular, and biochemical mechanisms, between the heart, the lungs, and the kidneys. The course is designed to address normal and abnormal structure and function, and rationale for investigations, treatment, and other key clinical decisions pertaining to the disorders of the cardiovascular, pulmonary, and renal systems. The first four weeks are focused on the cardiovascular system (Section 1), followed by three weeks on pulmonary system (Section 2). The last three weeks are focused on the renal system (Section 3).

Course Weeks: 10

Course Directors: Swapan Nath and Jim Furgerson

#### Mechanisms of Health and Disease 4

This eight-week course consists of two components. In section 1, students spend three weeks exploring integrated content related to the structure and function and diseases of the male and female reproductive systems and breast across the lifespan, including pregnancy and childbirth. In section 2, students will finish the course with five weeks dedicated to the gastrointestinal system and nutritional science. gaining a comprehensive understanding of normal features and pathological processes of the gastrointestinal system including physiology, pharmacology, anatomy, histology, pathology, mucosal immunology, nutrition, biochemistry, microbiology, developmental biology and neuroscience and relating these to pathologies of the gastrointestinal system.

**Course Weeks**: 8

Course Director: Sandeep Bansal and Jim Cox

#### Mechanisms of Health and Disease 5

The final course in the MHD sequence is a ten-week course that begins with a dedicated eight weeks, split into two sections that cover the nervous system structure and function, normal and abnormal clinical presentations. The final two weeks of the course will cover behavior and psychiatry, giving students foundational content integrated between the basic and clinical sciences. This course will establish a comprehensive understanding of the structure, as well as both the normal and abnormal function of the brain, spinal cord and nerves. Pharmacology and Neuroimaging will be integrated throughout the course. Additionally, this course will establish a fundamental understanding of behavior and behavioral disorders, including various treatment options.

Course Weeks: 10

Course Directors: Eric Gonzales and Jay Crutchfield

#### Clinical Skills

The Clinical Skills course prepares students to become an empathetic member of medical care team by instilling the necessary skills in areas of history taking, physical examination, communication, documentation, oral presentation, and clinical reasoning, through the use of standardized patients and small group teaching by a cohort of seasoned clinicians

#### **Course Weeks**: 27 **Course Director**: Sandra Esparza

#### Future Accelerators of Medicine and Beyond

This unique course exposes students to emerging or predicted concepts and ideas that are likely to have a significant impact on the delivery of healthcare during their career. Using design thinking and other strategies, students will learn about and contribute to the use and development of novel approaches for applying technology to improve the health of patients and populations. **Course Weeks:** 3-4

**Course Director**: Stuart Flynn

#### Longitudinal Integrated Clerkship Phase 1: Foundational Experience

This introductory clinical course exposes first-year medical students to the clinical environment through regular experiences with a designated primary care provider preceptor, including a panel of continuity patients. The focus of patient care in Phase 1 is communication, patient education and advocacy.

**Course Weeks**: 16 **Course Director**: Yun Tran

#### Preparation for Practice 1

This novel course prepares students for multidimensional aspects of the medical profession and provides students with practical tools and information to solve real-world problems. Topic include the business of medicine, medical ethics, health equity, healthcare policy, patient safety, informatics, public health, global health, communication and the compassionate practice, and team-based care. **Course Weeks**: 13

Course Director: Valerie Johnston

#### Scholarly Pursuit and Thesis 1

The Scholarly Pursuit and Thesis course provides students with tools to become a life-long learners and skills to perform initial steps in a scholarly research project. Phase 1 of SPT includes choosing a research mentor and creating a prospectus for a 4-year research project.

Course Weeks: 19

Course Director: Mike Bernas

#### USMLE Step 1 Preparation

The USMLE Step 1 preparation course is a six-week course in which medical students pursue directed independent study with faculty support and identify resources to prepare for the USMLE Step 1 Examination. Course Weeks: 6

Course Director: Angela Cantrell

### PHASE 2

#### Transition to Longitudinal Integrated Clerkships

The Transition to LIC course prepares students for the clinical years of their medical education through the development of knowledge and skills to transition becoming empathetic scholars in various clinical learning environments.

**Course Weeks**: 3 **Course Director**: Hari Raja

### Longitudinal Integrated Clerkship 2

During the Phase 2 Longitudinal Integrated Clerkship (LIC), students will participate over time in the comprehensive care of patients in the ambulatory and hospital environments with dedicated preceptors to acquire core clinical care knowledge and skills. The LIC experience consists of 8 clinical discipline clerkships (Emergency Medicine, Family Medicine, Internal Medicine, Obstetrics & Gynecology, Neurology, Pediatrics, Psychiatry, and Surgery). The LIC begins with 10 weeks of inpatient hospital immersions followed by 40 clinical weeks of ambulatory LIC rotations. During the ambulatory portion of the LIC, students will meet every Thursday afternoon for didactics known as Learning, Application and Pondering Sessions (LeAPs). Students will also participate in short clusters of inpatient time known as Bursts and additional short clusters of outpatient time known as Experiences.

Each clerkship has a different number of required sessions, Bursts and Experiences, but all have content occurring across 40 weeks, in addition to the clerkships with the inpatient immersions.

### LIC Guiding principles

- Continuity relationships with patients
- Continuity relationships with faculty
- Continuous learning community
- Continuity of setting
- Longitudinal development pedagogy

• Experiential learning

#### Emergency Medicine Clerkship

Students on the Emergency Medicine Longitudinal Integrated Clerkship will learn to care for undifferentiated and critically ill patients in local emergency departments. They will perform history and physicals, procedures, and generate differential diagnoses and plans under the supervision of an emergency medicine physician. During this clerkship, students will learn essential concepts in patient triage, acute resuscitation, outpatient vs. inpatient management, health care disparity and non-compliance. Additionally, the student will begin to develop a framework to make decisions based on limited information, which can lead to life-saving interventions in acutely ill patients. Students also will learn about common procedures encountered in the emergency department to include airway interventions, intravenous access, wound management, and effective interpersonal and inter-professional communication skills.

**Course Weeks**: 40 weeks **Clerkship Director**: Chinmay Patel

#### Family Medicine Clerkship

The Family Medicine clerkship is centered on the long-lasting and caring relationship between physicianpatient and family relationship. The clerkship highlights the importance of comprehensive, ongoing care for patients of all ages and genders as well as the benefits of integrating the biological, clinical and behavioral sciences to patients and the health care system. Students will understand the role of serving as patient's or family's advocate in all health-related matters in a variety of clinical settings. The clinical experience will focus on outpatient primary care but will allow students the opportunity to also see the full depth and breadth of family medicine in other clinical environments. This clerkship will provide opportunities for each student to acquire knowledge of community resources available for patients and families. A solid understanding of the social determinants of health is a main goal of the clerkship as students work with health care teams to eliminate barriers to access and care.

#### Course Weeks: 40 weeks

Clerkship Director: Nolan Mischel

#### Internal Medicine Clerkship

The Internal Medicine Clerkship is designed to expose students to in-patient and ambulatory experiences that will serve as a foundation throughout their professional lives as physicians, by integrating Phase 1 basic and clinical science knowledge with direct patient care. It will introduce the student to the varied aspects of medical care for adults across the life-span with emphasis in enhancing the skills of taking a history, performing a physical examination, presenting these findings, developing a differential diagnosis for common clinical presentations and problems, and developing evidence-based plans. The skills of data analysis and critical thinking about diseases in patients are also a key component of this clerkship. Students will be exposed to patients with common chronic medical conditions, including diabetes mellitus, obstructive and restrictive pulmonary disease, common cardiac conditions, thyroid disease, and common chronic gastrointestinal, liver and biliary tract diseases, among others. The Internal Medicine clerkship will also encompass knowledge in several subspecialties.

**Course Weeks**: 3 weeks of inpatient immersions + 40 weeks **Clerkship Director**: Suresh Kankanala

#### Obstetrics & Gynecology Clerkship

The Obstetrics and Gynecology Longitudinal Integrated Clerkship exposes students to the care of women throughout their life cycle. The Ob/Gyn clerkship will start with a 3-week inpatient immersion experience within the hospital and on labor and delivery. Students will learn the essential management of women during the labor and delivery process. During this time, students may also have exposure to emergent

gynecology admissions and surgeries. After the inpatient immersion, students will complete their longitudinal experience with an Ob/Gyn physician. Students will experience the care of women in the ambulatory setting, including well woman exams; contraception; work up, evaluation, and treatment of gynecologic conditions; and the care of patients throughout pregnancy and postpartum. They will follow their pregnant panel patients into the hospital for delivery as well as their gynecologic panel patients for gynecologic surgery or emergencies. They may have the chance to follow their patients into the subspecialty services as well. Students will also have to complete 2 experiences in Ob/Gyn subspecialties. This can include experiences in gynecologic oncology, maternal fetal medicine, pelvic reconstructive surgery, reproductive endocrinology and infertility, family planning, pediatric and adolescent gynecology, and ultrasound.

**Course Weeks**: 3 weeks of inpatient immersions + 40 weeks **Clerkship Director**: Melanie Lagomichos

#### Neurology Clerkship

The Neurology Longitudinal Integrated Clerkship equips medical students to develop a systematic approach to the evaluation, diagnosis, and management of neurologic problems and conditions. Using an understanding of neuroanatomy, students will develop fundamental localization skills and the ability to recognize common neurologic conditions and neurologic emergencies. Students will work primarily in the outpatient setting and will evaluate patients and develop assessment and management plans under direct supervision of a senior practitioner. Students will be exposed to inpatient neurology either through specific inpatient burst immersion experiences or in continuity care for their panel of patients who require inpatient hospitalization for diagnosis and/or treatment.

Course Weeks: 40 weeks

Clerkship Director: Claudia Perez

#### Pediatrics Clerkship

On the Pediatrics Longitudinal Integrated Clerkship, medical students will gain an understanding of the pediatric patient from birth to adolescence. The student will appreciate the importance of regular health maintenance visits to physical and emotional wellbeing and child development. Learners will recognize the relationship between pediatric patients and their caregivers and the implications of this interdependent relationship. Through the course of this clerkship, medical students will learn to care for pediatric patients with common acute illnesses as well as chronic conditions in the inpatient and ambulatory settings. **Course Weeks**: 1 week of inpatient immersions + 40 weeks

Clerkship Director: Hannah Smitherman

#### Psychiatry Clerkship

The Psychiatry Clerkship is designed to create meaningful experiences that complement the educational objectives from all specialties. Psychiatry is unique from other medical specialties in that we include a mental status exam as an addition to a physical exam and biopsychosocial formulation as part of assessment and plan. Additionally, mental health "levels of care" are appreciably different from the standard medical settings. Each day in psychiatry is a new opportunity to explore and advance science and mental health. Physicians are not simple observers; we are integral to the patient experience and their transition from experiencing illness to their understanding of wellness. Blending established psychological tenets with cutting edge pharmacology is an honor and privilege and we aim to give you a breadth of experience that will serve you well, no matter what specialty that you choose. **Course Weeks**: 40 weeks

Clerkship Director: Lili Meisamy

#### Surgery Clerkship

The General Surgery Longitudinal Integrated Clerkship will expose students to the foundations of surgical disease. Learners will explore the presentation, work-up, and surgical management of patients with emergent, urgent, and elective surgical disease. The students begin with a three week in-hospital experience, with a focus on emergent and inpatient management of surgical problems. This will include learning the principles of treatment of surgical conditions including urgent care through the emergency department and trauma. The student then completes the longitudinal experience, spending the majority of their surgical experience paired with a surgeon and having time both in the clinic and the operating room. The aim is to teach the basic principles of surgical evaluation and treatment, and also to gain prolonged exposure to a surgical faculty mentor.

**Course Weeks**: 3 weeks of inpatient immersions + 40 weeks **Clerkship Director**: Jennifer Grant

#### Scholarly Pursuit and Thesis 2

During this second year of SPT, students will perform specific research activities related to individual SPT projects under direction of the research Mentor, utilizing the skills of life-long learning, data collection and analyses, and collaboration with a research team to accomplish the goals of a 4-year research project.

**Course Weeks**: 51 weeks **Course Director**: Mike Bernas

#### PHASE 3

#### Longitudinal Integrated Clerkship 3

During the Phase 3 Longitudinal Integrated Clerkship (LIC), students will continue to participate in the comprehensive care of patients with dedicated preceptors to acquire more advanced patient care, knowledge and skills. The Phase 3 LIC includes clinical experiences in two of the following options: Emergency Medicine, Family Medicine, Internal Medicine, Obstetrics & Gynecology, Neurology, Pediatrics, Psychiatry, and Surgery.

Course Weeks: 14 Clerkship Director: Samuel Cullison

#### Preparation for Practice 2

The Preparation for Practice course in Phase 3 builds upon the themes introduced earlier in the curriculum and allows for integrated sessions designed to allow students to apply prior knowledge to complex real-world situations. Additionally, students will participate in team-based community impact projects. There will be six projects – two teams each from each of the three communities. Projects are based on the needs of the community. The projects will be built around the intersectionality of one of the ten P4P themes with one of the key societal problems identified by the SOM as an area of potential impact. Students will work within their teams to develop and pilot or implement a focused project with a deliverable that applies to their assigned community. Students are asked to collaborate for the good of the community. **Course Weeks**: 14

Clerkship Director: Valerie Johnston

#### Scholarly Pursuit and Thesis 3 & 4

During the third and fourth year of SPT, students will perform specific research activities of advancing SPT projects in collaboration and under direction of their research mentor. Students will utilize developed skills of life-long learning, data collection and analyses, and result synthesis to perform final research activities related to their individual SPT projects, submit the SPT thesis, and present results in a poster session in a public forum.

**Course Weeks**: 50 and 40 weeks respectively **Course Director**: Mike Bernas

#### Electives and Selectives

During the "Focus" stage of Phase 3, students are required to complete 8 weeks of selectives (4 weeks of critical care and 4 weeks of Advanced Inpatient Sub-Internship) and at least 28 weeks of electives. Students may take electives of their choosing for credit provided they meet Anne Burnett Marion School of Medicine at Texas Christian University requirements. The catalog of electives and selectives is available here.

**Course Weeks**: 36 **Electives Director**: Stevan Gonzalez

#### Transition to Residency

The Transition to Residency Course is the capstone to the Burnett School of Medicine four-year curriculum. The course provides an integrative experience that reinforces communication and clinical skills, provides hands on procedural practice, reviews and applies skills of self-directed learning and reflection, emphasizes team-based activities, and provides a universal foundation for entry into residency in the student's desired specialty.

**Course Weeks**: 5 **Course Director**: Adam Jennings and Craig Keaton