

# MEID - MEDICINE-INTERDISCI

## MEID 605 Foundations of Medicine I

**Credits 1 to 15. 1 to 15 Lecture Hours. 0 to 15 Lab Hours.** Basic principles of histology and physiology of human organ systems in an integrated fashion; understanding how organ structure and function of the human body interrelate; core knowledge provides a foundation for examining the pathophysiologic basis of human disease. **Prerequisite:** Admission to medical school.

## MEID 606 Foundations of Medicine II

**Credits 1 to 15. 1 to 15 Lecture Hours. 0 to 15 Lab Hours.** Integrated material in basic principles of medical biochemistry, genetics and pharmacology. **Prerequisite:** Admission to medical school.

## MEID 607 Medical Gross Anatomy

**Credits 1 to 15. 1 to 15 Lecture Hours. 0 to 15 Lab Hours.** Human gross anatomy including integrated dissection-based teaching and application of anatomic principles to patient care. **Prerequisite:** Admission to medical school.

## MEID 608 Neuroscience

**Credits 1 to 15. 1 to 15 Lecture Hours. 0 to 15 Lab Hours.** Correlation of the basic knowledge of central and peripheral nervous system structure and function with vulnerability to injury/disease and the resulting dysfunctional consequences and pharmacotherapeutics available to clinicians caring for patients with common neurological or psychiatric disorders; common presentation, diagnosis and treatments. **Prerequisite:** Admission to medical school.

## MEID 609 Introduction to Disease

**Credits 1 to 15. 1 to 15 Lecture Hours. 0 to 15 Lab Hours.** Fundamental topics in immunology, microbiology, pathology, pharmacology and patient interactions; presented in a case-based fashion; topics form a foundation for deeper understanding of the pathophysiologic basis of human diseases presented during the organ system-based blocks. **Prerequisite:** Admission to medical school.

## MEID 614 Evidence Based Medicine, Scholarship and Research I

**Credits 0 to 15. 0 to 15 Lecture Hours.** Develop research, investigative skills and problem solving, and support skill development in critical appraisal of medical literature as it relates to patient care.

## MEID 616 Cardiovascular

**Credits 1 to 15. 1 to 15 Lecture Hours. 0 to 15 Lab Hours.** Normal physiology and pathophysiology and diseases of the heart and vascular system; abnormalities including hypertension, atherosclerosis, congenital and valvular heart diseases and diseases of cardiac muscle and its electrical system; basic therapeutic approaches to these diseases and their impact on individuals and society. **Prerequisite:** Admission to medical school.

## MEID 617 Respiratory

**Credits 1 to 15. 1 to 15 Lecture Hours. 0 to 15 Lab Hours.** Normal physiology and pathophysiology of diseases of the respiratory system; clinical presentation, diagnosis and treatment of various types of respiratory diseases, such as obstructive, inflammatory, neoplastic and other pulmonary and upper respiratory conditions. **Prerequisite:** Admission to medical school.

## MEID 618 Medical Student Grand Rounds

**Credits 0 to 15. 0 to 15 Lecture Hours.** Apply, primarily, knowledge of biochemistry and genetics; receive didactic instruction in literature search skills and examine a specific medically relevant topic in depth; give presentation about this topic to peers and faculty in a small group setting.

## MEID 619 Practice of Medicine I

**Credits 1 to 15. 1 to 15 Lecture Hours.** Introduction to clinical and professional behaviors, concepts, skills and clinical reasoning necessary for the humanistic practice of medicine; complete, document and present a patient encounter; further awareness of patient-physician communication, ethics and medico-legal issues, interprofessional dynamics and the medical hierarchy, patient safety issues, cultural competence and student/clinician wellness. **Prerequisite:** Admission to medical school.

## MEID 620 Practice of Medicine II

**Credits 1 to 15. 1 to 15 Lecture Hours.** Development of patient encounter expertise; development of professional identity and history, physical, examination and clinical reasoning skills with special populations; expand awareness of patient-physician communication, ethics and medico-legal issues, inter-professional dynamics and the medical hierarchy, patient safety issues, cultural competence, diversity, social determinants of disease, and student and clinician wellness. **Prerequisite:** Admission into the College of Medicine.

## MEID 621 Clinical Shadowing

**Credits 0 to 10. 0 to 10 Other Hours.** Exposure to medicine in a clinical environment. **Prerequisites:** Doctor of medicine classification.

## MEID 622 Rural Community Medicine Shadowing

**Credits 0 to 10. 0 to 10 Other Hours.** Provide a clinical and community experience in a rural setting. **Prerequisites:** Doctor of medicine classification.

## MEID 623 Pre-Clinical Research

**Credits 0 to 10. 0 to 10 Other Hours.** Explore research opportunities and practice evidence-based medicine to the field of medicine. **Prerequisites:** Doctor of medicine classification.

## MEID 624 Service Learning

**Credits 0 to 10. 0 to 10 Other Hours.** Opportunity to pursue service learning in a medical context. **Prerequisites:** Doctor of medicine classification.

## MEID 625 Military Training

**Credits 0 to 10. 0 to 10 Other Hours.** Development of skills to serve country and medical profession as an Officer and leader. **Prerequisites:** Doctor of medicine classification.

## MEID 685 Directed Studies

**Credits 1 to 15. 1 to 15 Other Hours.** Designed to provide opportunities to refine skills in self-directed learning; students and faculty will identify deficiencies, set personal goals and develop an implementation plan to reach goals; meetings scheduled individually as required and completion determined by goals set; typically involves sitting for a National Board Exam. Must be taken on a satisfactory/unsatisfactory basis. **Prerequisite:** Admission to medical school.

## MEID 691 Research

**Credits 1 to 9. 1 to 9 Other Hours.** Research for thesis or dissertation.

**Prerequisite:** Approval of supervisory professor in chosen field.

## MEID 701 Hematology/Oncology

**Credits 1 to 10. 1 to 10 Lecture Hours.** Relevant and important topics in Hematology and Oncology; pathophysiology and clinical presentation of hematologic and oncologic diseases; introduction to therapy for such diseases. **Prerequisite:** Completion of Phase I Curriculum.

## MEID 702 Cardiovascular

**Credits 0.50 to 8. 0.50 to 8 Lecture Hours.** Normal physiology, pathophysiology and diseases of the heart and vascular system; abnormalities including hypertension, atherosclerosis, congenital and valvular heart diseases and diseases of cardiac muscle and its electrical system; emphasis on how cardiovascular disease impacts the individual patient as well as society. **Prerequisite:** Completion of Phase I Curriculum.

## MEID 703 Respiratory

**Credits 0.50 to 8. 0.50 to 8 Lecture Hours.** Normal physiology, pathophysiology and diseases of the respiratory system; clinical presentation, diagnosis and treatment of various types of respiratory diseases such as obstructive, inflammatory, neoplastic and other pulmonary and upper respiratory conditions. **Prerequisite:** Completion of Phase I Curriculum.

## MEID 704 Renal Genitourinary

**Credits 0.50 to 8. 0.50 to 8 Lecture Hours.** 5 to 8. Normal physiology, pathophysiology and diseases of the body fluids, kidney and lower genitourinary tract excluding the reproductive system; fluid and electrolyte and acid-base disorders; renal diseases including clinical presentation, diagnosis and treatment; visitation to a renal dialysis unit. **Prerequisite:** Completion of Phase I Curriculum.

## MEID 706 Metabolism/Gastrointestinal/Nutrition

**Credits 1 to 10. 1 to 10 Lecture Hours.** Normal physiology, pathophysiology and diseases of the gastrointestinal system and its associated glands; discussion on diseases with respect to biochemical aspects, clinical presentations, diagnostic tests and treatment; topics on nutrition relative to the cause of disease and clinical disease management. **Prerequisite:** Completion of Phase I Curriculum.

## MEID 707 Endocrinology and Reproductive Sciences

**Credits 0.50 to 8. 0.50 to 8 Lecture Hours.** 5 to 8. Normal physiology, pathophysiology and diseases that affect the endocrine and reproductive systems; clinical presentation, diagnosis and treatment of these diseases; relevant topics on human sexuality presented in various formats. **Prerequisite:** Completion of Phase I Curriculum.

## MEID 708 Integument-Musculoskeletal

**Credits 0.50 to 8. 0.50 to 8 Lecture Hours.** 5 to 8. Basic physiology of muscle and pathophysiology and diseases involving the skeleton, joints, soft tissues and skin; including disease related to calcium and bone metabolism and autoimmune disease; clinical presentation, diagnosis and treatment. **Prerequisite:** Completion of Phase I Curriculum.

## MEID 710 Humanities, Ethics, Altruism and Leadership III

**Credits 1 to 15. 1 to 15 Lecture Hours.** Continuation of the consolidation of the HEAL (Humanities, Ethics, Altruism, Leadership) concepts into a second semester, case-based study; cases from medical/inter-professional rounds and presentations used to help learn and apply the following medical humanities subjects: past, present and future of medicine, medical ethics, medical finance, spirituality, clinician resilience, communication skills, cultural competence, inter-professional collaboration, medical law, palliative care, patient navigation, professionalism, service learning and systems-based practice. **Prerequisite:** Admission into the College of Medicine.

## MEID 711 Evidence Based Medicine

**Credits 1 to 15. 1 to 15 Lecture Hours.** Continued development of critical appraisal and application of biostatistical skills in literature review; quantitative techniques in evaluating randomized controlled trials, observational studies and clinical practice guidelines; advanced participation in team based learning/journal club; continued research ethics training and introduction to research opportunities. **Prerequisite:** Admission into the College of Medicine.

## MEID 712 Practice of Medicine III

**Credits 1 to 15. 1 to 15 Other Hours.** Reinforcement of clinical and professional behaviors, concepts, skills and clinical reasoning necessary for the humanistic practice of medicine; rotation through primary care experiences in family medicine, internal medicine, pediatrics, gynecology, otorhinolaryngology, obstetrics, ophthalmology, dermatology and orthopedics. **Prerequisite:** Admission to Medical School.

## MEID 713 Transition to Clerkship

**Credits 0 to 10. 0 to 10 Other Hours.** Development of clinical reasoning and performing general procedures of a physician; emphasis on skills related to each clerkship, taking a history, performing physical examination, writing notes, and presenting patients. **Prerequisites:** Doctor of Medicine classification.

## MEID 750 Foundations in Health Systems Science

**Credits 1 to 10. 1 to 10 Lecture Hours.** Foundational concepts in health systems science; emphasis on population health, healthcare structures and processes, patient safety, quality improvement, healthcare financing and value, systems thinking; required for Health Systems Science Track. **Prerequisite:** Admission to medical school.

## MEID 751 Reframing Clinical Care in the Context of Health Systems Science

**Credits 1 to 10. 1 to 10 Lecture Hours.** Second in a series for the Health Systems Science track; multidisciplinary case based discussion format with independent study. Must be taken on a satisfactory/unsatisfactory basis. **Prerequisite:** Admission to medical school.

## MEID 801 Healthcare Advocacy and Public Policy

**Credits 2.50 to 7. 2.50 to 7 Other Hours.** Work with designated faculty, staff at the medical school, in advocacy and legal affairs offices such as those of the Texas Medical Association and/or physician specialty organizations surrounding advocacy issues that are topical and/or relevant to interests; specific duties may include conducting background research, meeting with legislators, constituencies and key community stakeholders, developing and/or implementing a communications strategy (including fact sheets and 'elevator' speeches), and drafting a report, analysis, or model legislation; non-legislative community advocacy activities may include visiting with non-profit community based programs dependent on public or private funding and identifying an opportunity for a longitudinal advocacy project or contribution to an existing project on a short term basis.

## MEID 804 Academic Mentoring

**Credits 0 to 10. 0 to 10 Other Hours.** Opportunities to teach and develop curricular materials related to standardize exams; instruction on the management and instruction of small groups, preparation for and lead small groups of students studying for standardize exams and development of curricular materials related to exams; involves a shift schedule with students required to complete a prescribed number of hours to receive credit. **Prerequisite:** Doctor of Medicine classification.

## MEID 805 Residency and Beyond

**Credits 0 to 10. 0 to 10 Other Hours.** Exposure to lifelong learning tools to assist as residents and future leaders; use of online resources to find, organize, and create information to support professional development and lifelong learning goals; focus on communication and conflict management; professional career development; recognizing deficiencies in knowledge; utilization of information resources in lifelong learning and understanding the importance of scholarly work within residency and as a future doctor. **Prerequisites:** Doctor of Medicine classification.

## MEID 806 Wilderness and Disaster Medicine

**Credits 1.25 to 10. 1.25 to 10 Other Hours.** Wilderness and disaster medicine both require meeting the challenges of working in a low resource environment; wilderness medicine environment could result from being in a remote location with few resources, while disaster medicine typically results in having resources overwhelmed; both require a need to look at delivering medical care from a unique perspective that is not readily taught in most hospital or clinic based practices; both require exceptional leadership and teamwork to achieve optimum outcomes. **Prerequisite:** 4th year classification.

## MEID 807 Internship Bootcamp

**Credits 1.25 to 2.5. 1.25 to 2.5 Other Hours.** Participation in 1-2 weeks of simulated patient encounters that cover top calls interns can expect on night call; cases match and cover Core Entrustable Professional Activities set by the AAMC which should be possessed at graduation; ethical scenarios, interpersonal communication with families and interdisciplinary professional communication topics; formative assessment, self-assessment and summative assessment. Must be taken on a satisfactory/unsatisfactory basis. **Prerequisite:** Completion of third year medical school requirements.

## MEID 808 United States Medical Licensing Examination Step 2 Clinical Knowledge Review and Prep

**Credits 0 to 10. 0 to 10 Other Hours.** Designed for dedicated study for Step 2 Clinical Knowledge, national board exam that assesses ability to apply medical knowledge, skills, and understanding of clinical science essential for patient care, health promotion and disease prevention. **Prerequisites:** Doctor of Medicine classification.

## MEID 810 Connecting and Communicating with Patients and Peers

**Credits 1 to 15. 1 to 15 Other Hours.** Exposure to verbal and nonverbal communication techniques that facilitate greater connection with patients and their families; includes establishing a relationship, gathering information through patient-interviews, transmitting information effectively, negotiating treatment, explaining mistakes, negotiating and resolving conflict and closing sessions without making patients feel rushed or dismissed; underpinnings of an effective doctor-patient relationship, namely a genuine understanding of patient experience which encompasses end-of-life concerns, concerns about aging and body image and fears about medical procedures and chronic illness; building effective communication with colleagues. **Prerequisite:** Admission to medical school.

## MEID 811 Medicine in the Wild

**Credits 1 to 15. 1 to 15 Other Hours.** Learn and practice wilderness medicine on an extended wilderness expedition in the Gila Wilderness of New Mexico; includes National Outdoor Leadership School (NOLS) core curriculum and Wilderness Medicine Institute (WMI) wilderness medicine curriculum. **Prerequisite:** Admission to medical school.

## MEID 814 Health Systems Science Education

**Credits 1.25 to 10. 1.25 to 10 Other Hours.** Analyze current and proposed health science system courses for gaps; design offerings to address gaps; utilized data to evaluate current courses and develop outcome measures for health science system courses. Must be taken on a satisfactory/unsatisfactory basis. **Prerequisite:** Admission to medical school.

## MEID 816 Interprofessional Disaster Readiness

**Credits 0 to 10. 0 to 10 Other Hours.** Designed to build leadership skills, attain disaster response competencies; diagnose, treat, and care for volunteer patients and populations in simulated setting. **Prerequisites:** Doctor of Medicine classification.

## MEID 817 Health Systems Science-Capstone Course

**Credits 1 to 15. 1 to 15 Other Hours.** Multifaceted, long-term investigative health systems science track capstone; independent project required at conclusion including poster, platform presentation or paper worthy of submission to local, state or national meeting/conference. **Prerequisites:** Admission to medical school, completion of pre-clerkship or basic science curriculum, completion of semesters 1-4 of the medical school curriculum; MEID 750; MEID 751 or concurrent enrollment.

## MEID 820 Case Study: Fundamental Science Mechanisms Explaining Clinical Profiles

**Credits 0 to 10. 0 Lecture Hours. 0 to 10 Other Hours.** Preparation of a case report with primary basic science angle; review of primary clinical and basic science literature for specific case pathology; proposition of innovative and feasible mechanisms for approaches; development of novel therapy; submission of innovative case report for peer-reviewed publication in high-impact medical journal. Must be taken on a satisfactory/unsatisfactory basis. **Prerequisite:** Doctor of Medicine classification.

## MEID 821 Practice of Medicine IV

**Credits 1 to 15. 0 Lecture Hours. 1 to 15 Other Hours.** Introduction to the role of a teacher prior to residency; development of an attitude and identity as teachers; including topics focused around ethical principles and dilemmas in academic medicine such as HIPAA, sexual harassment, disruptive physician, impaired physician, physician moral injury and wellness and patient safety; occurs during first semester of clinical clerkships; Must be taken on a satisfactory/unsatisfactory basis.

**Prerequisite:** Doctoral classification.

## MEID 822 Practice of Medicine V

**Credits 1 to 15. 1 to 15 Other Hours.** Introduction to the role of teacher prior to residency; development of knowledge, skills, and attitudes to identify as teachers; occurs during first semester of clinical clerkships.

**Prerequisites:** Doctoral classification.

## MEID 823 Practice of Medicine VI - Interprofessional Social and Ethical Dilemmas in Healthcare

**Credits 1 to 15. 0 Lecture Hours. 1 to 15 Other Hours.** Interdisciplinary representation from the College of Medicine (COM), College of Nursing (CON), and College of Pharmacy (COP), School of Public Health (SPH); case-based learning; categories include interprofessional conflict, ethics in healthcare, and gaps in professionalism; focus on social factors, racial issues and implicit and explicit biases in healthcare; proposal of potential solutions to the presented conflict. Must be taken on a satisfactory/unsatisfactory basis. **Prerequisite:** Doctoral classification.

## MEID 824 Lifestyle Medicine and Behavior

**Credits 0 to 10. 0 to 10 Lecture Hours.** Exposure to lifestyle medicine, the evidence-based practice of helping individuals and families adopt and sustain healthy behaviors that affect health and quality of life, such as healthy eating, physical activity, weight control, sleep, relationships, religion, and stress reduction. **Prerequisites:** Doctor of Medicine classification.

## MEID 825 Value Based Medicine

**Credits 0 to 10. 0 Lecture Hours. 0 to 10 Other Hours.** Review of data analytics, definition of strategic clinical opportunities, and operationalization of transformative change to improve the quality of care for vulnerable populations; real world experience based on value-based payer contracts with goals to improve patient outcomes at appropriate cost and utilization; value-based care discharge planning from social worker/case management, predictive analytics to identify patients for nursing outreach, and quality, cost, and utilization. Must be taken on a satisfactory/unsatisfactory basis. **Prerequisite:** Doctor of Medicine classification.

## MEID 828 Critical Inquiry and Research in Medicine

**Credits 0 to 10. 0 Lecture Hours. 0 to 10 Other Hours.** Clinical practice and rigor on scientific methods of research; exploration and identification of gaps in scientific knowledge in areas of interest using literature search and development of an individual hypothesis. Must be taken on a satisfactory/unsatisfactory basis. **Prerequisite:** Doctor of Medicine classification.

## MEID 830 Service-Learning Internal Medicine and Pharmacy Interdisciplinary Health Research

**Credits 0 to 10. 0 to 10 Other Hours.** Exposure to the healthcare needs of a vulnerable population at high-risk for complications due to chronic illness using telehealth. **Prerequisites:** Doctor of medicine classification.

## MEID 834 Health Systems Science - Appreciation of Hospital Operations

**Credits 0 to 10. 0 to 10 Other Hours.** Overview and appreciation of the hospital operations and ancillary support services that support clinical care of patients. **Prerequisites:** Doctor of Medicine classification.

## MEID 835 Health Systems Science - Case Management, Social Determinants of Health, and Hospital Throughput

**Credits 0 to 10. 0 to 10 Other Hours.** Overview of case management and hospital throughput. **Prerequisites:** Doctor of Medicine classification.

## MEID 836 Practical Application of Evidence Based Medicine in the Clinical Setting

**Credits 0 to 10. 0 to 10 Other Hours.** Research of practicing evidence-based medicine (EBM), literature searches and applying formal rules of evidence and biostatistics in evaluating medical literature for effective patient care; focus on practical application of evidence-based medicine to clinical problems seen in clerkships or in other clinical encounters. **Prerequisites:** Doctor of Medicine classification.

## MEID 850 Practice of Medicine Capstone

**Credits 1.25 to 10. 1.25 to 10 Other Hours.** Required 2-week capstone for fourth year medical students; designed to educate on relevant aspects of medical jurisprudence, including state and federal regulations and applicable laws and risk management; addresses other topics of practical relevance to professional careers and provides a refresher on medical topics needed for internships such as pain management, dosing and proper prescribing techniques; advice on practice management, personal and professional financial planning and reviews the process for licensure and credentialing; ethics and professionalism. **Prerequisite:** Fourth year classification.

## MEID 985 Special Topic

**Credits 1.25 to 12. 1.25 to 12 Other Hours.** Formally described elective courses at another medical school or off-campus opportunities that are not formally approved electives. The College of Medicine requires that each of these electives be approved prior to the rotation.

## MEID 989 Special Topics in Interdisciplinary Medicine

**Credits 1.25 to 12. 1.25 to 12 Other Hours.** Connecting topics and issues across disciplines to enhance what is learned in clinical clerkships by applying interdisciplinary perspectives; develop knowledge, skills, and professional values in an ongoing reflective manner throughout the clinical years of medical school.

## MEID 999 Medicine Interdisciplinary

**Credits 0 to 12. 0 to 12 Other Hours.** Exposure to interdisciplinary clinical research, basic science research, library research, other basic science activities and other clinical activities. **Prerequisites:** Doctor of Medicine classification.